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A

VIEW

OF THE

NERVOUS TEMPERAMENT;

BEING

A PRACTICAL ENQUIRY

INTO

THE INCREASING PREVALENCE, PREVENTION, AND TREATMENT OF THOSE DISEASES

COMMONLY CALLED

NERVOUS, BILIOUS, STOMACH, AND LIVER COMPLAINTS; INDIGESTION; LOW SPIRITS; GOUT, &c.

THE SECOND EDITION.

BY THOMAS TROTTER, M. D.

LATE PHYSICIAN TO HIS MAJESTY'S FLEET UNDER THE COMMAND OF ADMIRAL EARL HOWE, K. G.; AND TO THE SQUADRONS COMMANDED BY ADMIRAL LORD BRIDPORT, K. B. ADMIRAL EARL ST VINCENT, K. B. AND THE HONOURABLE ADMIRAL CORNWALLIS;

MEMBER OF THE ROYAL MEDICAL SOCIETY OF EDINBURGH; AN HONORARY MEMBER OF THE ROYAL PHYSICAL SOCIETY OF EDINBURGH, OF THE MEDICAL SOCIETY OF ABERDEEN; AND FORMERLY PHYSICIAN TO THE ROYAL HOSPITAL AT HASLAR, &c. &c.

Boundless intemperance
In Nature is a tyranny: it hath been
The untimely emptying of the happy throne,
And fall of many kings. SHAKESPEAR.

PRINTED BY EDW. WALKER, NEWCASTLE,

FOR LONGMAN, HURST, REES, AND ORME, LONDON.

1807.

PREFACE TO THE SECOND EDITION.

THE rapid ſale of a large impreſſion of this work having rendered another edition neceſſary, many important facts are now added, ſo as to make the hiſtory of the Nervous Conſtitution as full as the preſent ſtate of knowledge will admit of. Since the publication of this book, I have been conſulted by letter, from different parts of England, by a numerous liſt of nervous patients, who ſeem to have been much gratified by the explanation which is here given of theſe diſeaſes; and I can now add with great pleaſure that the whole have recovered their health.

My grateful thanks are juſtly due to thoſe members of the profeſſion, in London and other large towns, who have, with a liberality and benevolence worthy of their learning and eminence, ſo warmly recommended this treatiſe, as calculated to produce much good in families of the nervous temperament. An opinion expreſſed with ſuch diſintereſtedneſs, will amply ſecure my labours againſt the cavils of the ignorant and illiberal.

Whoever is acquainted with the medical literature of the preſent day, will perceive, that I have uſed no affected language in the introduction of the words "NERVOUS TEMPERAMENT," into my title. They are given on the higheſt authority, as referred to in the proper place; for I am acquainted with no name in medicine, under which I would ſooner take ſhelter than that of Dr Gregory, of Edinburgh. As marking a peculiar ſtate of body, the term is well adapted to comprehend that variety of anomalous ſymptoms, which cannot well be reduced to a generic definition. It is a fact, that I think will be generally admitted by every phyſician who has attended to this claſs of diſeaſes, that the treatment or cure, turns almoſt entirely on the particular condition of the ſtomach, and accommodating medicine to the ſtate of that organ. In female habits this is found to be ſtill more the caſe than in males: and although it requires the moſt acute apprehenſion to detect the different traits of conſtitution ſo as to ſuit the preſcription to theſe, yet it appears to me, to reduce the practice to a very narrow compaſs, if the exhibition of articles of *materia medica*, is to be at all ſucceſsful. The prevention, therefore, as operating with more certainty on the human body, and effecting more laſting changes, will always be kept in view by the prudent phyſician; while at the ſame time it has the advan-

tage of being more familiar to the capacity of the patient. In the courſe of my practice, an immenſe number of caſes ſaid to be "*diſeaſed liver*," have been preſented to me. But according to the pathology on which my general doctrine is founded, I conſidered nineteen out of twenty of the whole, to be nothing more than that affection of the *hepatic ſyſtem*, which accompanies a weak conſtitution of bowels: and I think myſelf fully juſtified by the health which ſucceeded a treatment reſting on theſe principles. But, as I profeſs no obſtinate attachment to my own opinions, I ſhall gladly retract my errors, when pointed out by thoſe who are more capable of obſervation; and moſt willingly ſhall I embrace improvement from whatever quarter it may come. On the whole, I have great reaſon to be ſatisfied with having directed my ſtudies to this enquiry: for what was originally written as ſelf-defence,* has in the end proved to be a Treatiſe on Nervous Diſorders. "*There is a Providence that ſhapes our ends, rough hew them as we will.*" SHAKESPEAR.

Newcaſtle on Tyne, *October* 1, 1807.

* Vide a Case of Gastrodynia, (Nervous Temperament) in Nos. 68 and 72, of the London Medical and Physical Journal, for 1804-5.

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DEDICATION.

TO JAMES GREGORY, M. D.

Professor of the Practice of Medicine in the University of Edinburgh, &c. &c. &c.

MY DEAR SIR,

In requesting the sanction of your name to the present work, with honest pride I acknowledge the many and great obligations you have conferred on the profession of medicine by your estimable talents; but still more, by the manly spirit and dignified independence, with which, on all occasions, you have defended its rights, and maintained its honours. At a time when avarice is making rapid advances to narrow its benevolence, and a servile compliance with the frivolous forms of fashionable life is degrading its duties, it must be grateful to every generous mind, to behold a nobler

example from the practical chair of the Univerſity of Edinburgh. And ſhould any merit be due to the following pages, it will be derived from the humble imitation of your zeal, integrity, and candour. Mankind have ſeldom been delighted with a picture of their infirmities; and the phyſician who warns his fellow mortals how to evade them, is liable to be conſidered rather as an officious adviſer than a welcome monitor. But if it is true, as I have ſaid, that nervous diſeaſes make up two-thirds of the whole with which civilized ſociety is infeſted, and are tending faſt to abridge the phyſical ſtrength and mental capacities of the human race, it muſt be the duty of ſome perſon to ſound the alarm, and to announce the danger, however unprofitable the taſk.

The work, which I have now the honour to lay before the public, was written eighteen months ago: and though ſeveral authors have appeared on the ſame ſubject, ſince that time, I do not find my labours anticipated. The ground which I have taken in the diſcuſſion, is in many reſpects new. This VIEW OF THE NERVOUS TEMPERAMENT may therefore be conſidered as the reſult of a more

extenſive field for experience than generally falls to the lot of every phyſician; for it has been acquired by attendance on ſome thouſands of caſes in both ſexes, under all the varieties of rank, employment, age, ſituation, climate, &c.

I well remember, when I was young in the profeſſion, no diſeaſes puzzled me ſo much as thoſe of the nervous kind. I was every day committing blunders: in vain I had recourſe to books, for books could not ſupply the deficiency, and I was frequently mortified with ſeeing my patients get worſe under my treatment. Time and much experience only, were capable of correcting my errors. What firſt gave my practice conſiſtency, was the careful ſtudy of the nervous temperament; to mark what were its original peculiarities; what its propenſities; and by what cauſes its diſeaſes were drawn forth. I am rather apt to believe, that moſt young men, in beginning their medical career, run great hazard of miſtaking theſe complaints; as they only become apparent by a concourſe of ſymptoms, that is extremely irregular and equivocal. And I have known more than one inſtance of

nervous females having been treated for typhus fever, to the great alarm of their families, when they were labouring under debility of body and mind, widely different in nature; and attended too by men who called themſelves ſeniors in the practice. A prevailing contagion muſt be badly underſtood, when both phyſician and patient become dupes of ſuch unneceſſary fears. I am, therefore, in hopes, that the method which I have taken in the following inveſtigation, will ſomewhat contribute to familiarize the junior members of the profeſſion with the genius of nervous diſorders, and to guard them againſt miſtakes in the treatment.

But I have no heſitation in thinking, that my enquiry may be uſeful to general readers. We meet with numbers of perſons in the world, who, though obſtinate in refuſing advice for their own health, are nevertheleſs very ready to comply with every precept that may correct the hereditary prediſpoſition to diſeaſe in their offspring. Much of my animadverſions on theſe diſorders, is with a view to the *prevention;* and if parents and guardians will only intereſt themſelves in the buſineſs, my trouble cannot be in vain.

It is indeed a taſk, in the preſent ſtage of ſociety, that well deſerves the attention of every friend of his fellow-creatures, and his country. Great Britain has outſtripped rival ſtates in her commercial greatneſs: let us therefore endeavour to preſerve that aſcendancy, which is ſo eſſential to our welfare in the convulſed condition of Europe, by the only means that can do it effectually. That is, by recurring to ſimplicity of living and manners, ſo as to check the increaſing prevalence of nervous diſorders; which, if not reſtrained ſoon, muſt inevitably ſap our phyſical ſtrength of conſtitution; make us an eaſy conqueſt to our invaders; and ultimately convert us into a nation of ſlaves and ideots.

It has been cuſtomary with writers on theſe diſeaſes, to illuſtrate their ſubject with the anatomy and phyſiology of the parts concerned. But I ſee no neceſſity for this in the preſent enquiry; and my ſheets have unexpectedly ſwelled to a ſize that precludes the introduction of ſuch matter. I muſt therefore refer my young readers to Dr Whytt on nervous diſorders, and to the valuable volume of Dr Saunders on the liver,

for what they may not find explained in common elementary treatiſes of anatomy and phyſiology.

My plan is briefly this: a curſory view is given of the health of the ſavage ſtate, in order that the contraſt with civilized mankind may appear more ſtriking. The inhabitants of a large town are next deſcribed; which may be conſtrued into a kind of medical analyſis of ſociety: and this leads to an account of the *remote cauſes*, as found among refined modes of life and luxurious habits. A chapter follows on the influence which theſe diſorders have on national character and domeſtic happineſs. The hiſtory and progreſs of nervous diſeaſes, with a general doctrine, or ſummary of the pathology, precede the prevention and method of treatment.

On the whole there will be found little of what is called theory in this diſcuſſion: unſhackled by any attachment to ſyſtem, and unſeduced by the love of novelty, I have endeavoured to delineate the NERVOUS TEMPERAMENT, as I have ſeen it in actual practice, and in a large intercourſe with mankind. But in treating of a claſs of diſeaſes out of the uſual tract of enquiry, I am willing to

confeſs, that many peculiarities may be obſerved, and ſome obſcurities detected. I will make no apologies to my countrymen, for offering them my advice, on matters that ſo nearly concern their health: if the title of my book excites diſlike, let them remember the peruſal of it is voluntary. Nor will I inſult their diſcernment, by any fulſome juſtification of my own motives and diſintereſtedneſs: if I have acted the part of an honeſt man, that muſt anſwer for itſelf.

But, ſir, ſhould you recognize any thing in theſe labours worthy of the medical ſchool of Edinburgh, I ſhall be greatly overpaid. And as this may be the laſt time I ſhall appear before the public as an author, gratitude compels me to thank the profeſſion, both in this country and on the Continent, for the kind reception of my former ſtudies, and the numerous teſtimonies given in their favour.

I remain, my dear Sir,

With the utmoſt regard,

Your moſt faithful humble ſervant,

T. TROTTER.

Newcastle on Tyne,
Nov. 8, 1806.

INTRODUCTION.

THE laſt century has been remarkable for the increaſe of a claſs of diſeaſes, little known in former times, and which had but ſlightly engaged the ſtudy of phyſicians prior to that period. They have been deſignated, in common language, by the terms, NERVOUS; SPASMODIC; BILIOUS; INDIGESTION; STOMACH COMPLAINTS; LOW SPIRITS; VAPOURS, &c. A generic definition of them, from their protean ſhape and multiform appearance, is almoſt impracticable. They vary in every conſtitution, and aſſume in the ſame perſon, at different times of life, an inconſtant aſſemblage of ſymptoms.

In another work, when curſorily treating of theſe diſeaſes, I have attempted to give a general character of them, and for want of a

better, I ſhall inſert it here. "Nervous "feelings, nervous affections, or weak nerves, "though ſcarcely to be reſolved into technical "language, or reduced to a generic defini- "tion, are in the preſent day, terms much "employed by medical people, as well as "patients; becauſe the expreſſion is known "to comprehend what cannot be ſo well "explained. An inaptitude to muſcular "action, or ſome pain in exerting it; an "irkſomeneſs, or diſlike to attend to buſineſs "and the common affairs of life; a ſelfiſh "deſire of engroſſing the ſympathy and atten- "tion of others to the narration of their "own ſufferings; with fickleneſs and in- "ſteadineſs of temper, even to irraſcibility; "and accompanied more or leſs with dyſpep- "tic ſymptoms, are the leading characteriſtics "of *nervous diſorders;* to be referred in "general, to debility, increaſed ſenſibility, "or torpor of the alimentary canal." *

In the preſent day, this claſs of diſeaſes forms by far the largeſt proportion of the whole, which come under the treatment of

* Medicina Nautica. Vol. iii, Spaſmodic Affections.

the phyſician. Sydenham at the concluſion of the ſeventeenth century, computed fevers to conſtitute two thirds of the diſeaſes of mankind. But, at the beginning of the nineteenth century, we do not heſitate to affirm, that *nervous diſorders* have now taken the place of fevers, and may be juſtly reckoned two thirds of the whole, with which civilized ſociety is afflicted. Dr Cheyne who wrote about the year 1733, in his work entitled the "*Engliſh Malady*," makes nervous diſorders almoſt one third of the complaints of people of condition in England: from which we are led to believe, they were then little known among the inferior orders. But from cauſes, to be hereafter inveſtigated, we ſhall find, that nervous ailments are no longer confined to the higher ranks in life, but rapidly extending to the poorer claſſes. In this neighbourhood, as far I am able to judge from my own experience, they are by no means limited to the rich: and it affords a melancholy picture of the health of the community, to obſerve this proportion ſo very large. It is probable the other countries of Europe do not exhibit ſuch general examples of theſe diſeaſes; as many of their

cauſes are to be traced to the peculiar ſituation of Britain; its inſular varieties of climate and atmoſphere; its political inſtitutions and free government; and above every thing, its vaſt wealth, ſo diffuſed among all ranks of people.

A

VIEW

OF THE

NERVOUS TEMPERAMENT,

&c. &c. &c.

CHAPTER I.

The health of the ſavage ſtate compared with modern times.

THE ſavage and civilized ſtates of man, as may be obſerved in the earlieſt accounts of hiſtory, have been marked by phyſical traits of character, as well as moral: and though his diſeaſes and his vices may be ſmaller in number in the one condition than in the other, they have nevertheleſs exhibited ſigns and diſpoſitions peculiar to themſelves. Our

rude anceſtors, born and brought up in a hut or a hovel, almoſt naked from infancy to manhood, and conſtantly expoſed to the weather, whether employed in agriculture, tending herds and flocks, or the more laborious purſuits of hunting and fiſhing, had few bodily diſorders. Death, under ſuch modes of living, is to be conſidered as the decay of nature: ſome may fall by war, and a few by accidents; but none are brought to the grave by exceſs or debauch. It is notorious that all the ſavage tribes of the new continent, when compared with European manners, are obſerved to be chaſte, temperate, and abſtemious. * Tacitus, ſpeaking of the manners of the Germans in his days, deſcribes the convivial aſſemblies of that people, where drinking fermented liquors was carried to the moſt ferocious degree of ebriety; but no where does he mention their diſeaſes as having ſprung from this cauſe. The favourite beverage among them ſeems to have been beer, which when duly prepared, is a wholeſome drink. But their manner of living muſt

* The inhabitants of ſome of the South Sea Iſlands are examples to the contrary.

in a great meaſure have counteracted the effects of intoxication: ſuch as the robuſt exerciſes, and their ſimple food, "conſiſting of wild apples, freſh veniſon, curds and cream," and the like, none of which were calculated to oppreſs the ſtomach and hurt digeſtion, as we obſerve among full livers in modern times. Indeed it is to be remarked every where, how much longer the laborious porter and drayman, who get often drunk, will continue their career, than the leſs-exerciſed gentleman: a proof that labour, by invigorating and hardening the body, makes it reſiſt even the effects of debauch. How ſoon would the morning dram of a Billingſgate fiſh-wife, deſtroy one of our high bred women of faſhion?

The virtue of chaſtity was general among the Germans: matrimony, it is ſaid, was ſeverely kept; and the intercourſe of the ſexes, before the body was full-grown, was ſtrictly prevented. Here was one of the ſtrongeſt ſecurities of health; as a contrary practice in this age, is one of the great cauſes of bodily decay. We are alſo told, that the large limbs and muſcular form of the parents, were expreſſed in the ſhape of the children. Ano-

ther proof of bodily health was, that every mother was able to nurſe her own child; the oppoſite to this parental office, is one of the lamentable failings of modern conſtitutions. It was part of the matrimonial contract for the wife to ſhare with the huſband his labours and dangers, and to be his companion in peace and war. This cuſtom, of courſe, prevented all the evils of a ſedentary life. In a country that held the marriage vow ſo ſacred, adultery was ſeldom found; and it was conſidered in ſo heinous a light, that neither beauty nor wealth could ever find the adultereſs another ſpouſe. Such was the healthful ſyſtem of manners practiſed in the woods of Germany, which were the cradle of thoſe laws that now govern this land of freedom.

The feudal ſyſtem which ſucceeded to the age which Tacitus deſcribes, and which ſpread over Europe, was highly favourable to vigour of body, and by conſequence to health. The women were then accuſtomed to attend their huſbands to the field, and to remain in ſight of the battle; not only with a view to load them with praiſes and careſſes at the concluſion; but to remind them of the protection due to wives and children. Courage and

valour, with ſuch incentives would become invincible. All the paſtimes and tournaments of thoſe days, were only kinds of palæſtræ for exerciſing the body, ſo as to enure it to martial fatigues. The females were conſtant ſpectators of theſe tilts and feats, and their preſence did not fail to animate the brave; and it was the province of the fair to reward the victor, and confer the prize on the ſucceſsful candidate. Now in the woods of Germany, where mothers of families ſhared with their huſbands all the toils and privations of the field, ſuch complaints as *bilious and nervous*, muſt have been unknown, becauſe all the cauſes which render them prevalent in this age, did not then exiſt. They are the progeny of wealth, luxury, indolence, and intemperance, as they now appear.

In the eighteenth chapter of Geneſis, we meet with ſome fine proofs of the ſimplicity of living among the patriarchs, which may be called the earlieſt ſtage of civilized ſociety. When Abraham entertained the three angels in the plains of Mamre, he haſtened to welcome them with all the tokens of a kind hoſpitality. Sarah his wife kneaded three meaſures of fine meal into cakes, and baked

them upon the hearth. Abraham himſelf went to the herd, and fetched a calf tender and good, and gave it unto a young man to dreſs it. And he took butter and milk, and the calf which he had dreſſed, and ſet it before them, and they did eat: and he ſtood by under a tree, as if to watch when they wanted any thing. Again, when Lot entertained two angels, it is ſaid, he made a feaſt, and baked unleavened bread. Theſe banquets for angels, ſo ſimply detailed in holy writ, would be conſidered poor fare for the epicures and gluttons of our times, who dine at a Lord Mayor's feaſt, if we are to judge from the liſt of dainties, juſt publiſhed, of one of theſe entertainments. We are farther told, in the ſacred volume, that Boaz invited Ruth to come at meal time, and eat bread, and dip her morſel in the vinegar with the reapers; and he reached her parched corn to eat. Our preſent labourers in the harveſt would be ſadly pinched with hunger before they would content themſelves with ſuch ſimple fare. In the Iliad and Odyſſey of Homer, we meet every where accounts of the like ſimplicity of food and manners. When the foreign ambaſſadors came to treat with the Roman con-

ful Dentatus, they found him at his farm dreſſing turnips: a ſpecies of amuſement and economy that does not enter the budget of Britiſh ſtateſmen. Where the earth is thinly peopled, and when commerce has made no progreſs, mankind live chiefly in families: and their habits and employments uniformly inculcate temperance and ſobriety. Society and population muſt be far advanced, before luxurious living, and vicious cuſtoms, attain ſuch growth as to enervate the human frame.

The *nervous ſyſtem*, that organ of ſenſation, amidſt the untutored and illiterate inhabitants of a foreſt, could receive none of thoſe fine impreſſions, which, however they may poliſh the mind and enlarge its capacities, never fail to induce a delicacy of feeling, that diſpoſes alike to more acute pain, as to more exquiſite pleaſure. The timid diſpoſitions are apt to increaſe in proportion to delicacy of feeling and debility of frame. We ſee the truth of this fully exemplified, as we recede from the country to the town; from the occupation of the huſbandman and farmer, to that of the artiſan and manufacturer; and from the ruſtic expoſed to all the viciſſitudes of weather and ſeaſon, to the recluſe life of the citizen. The

phyſician, of a cultivated underſtanding, who knows how to appreciate the reſources of his art, in approaching the ſick bed of any of theſe perſons, would endeavour to inveſtigate the marks and diſpoſitions of body and mind, that give the peculiar caſt of character to each, before he would attempt to preſcribe for their diſeaſes. He would not confound the complaint of the ſlim ſoft-fibred man-milliner with that of the firm and brawny ploughman; nor would he miſtake the nervous cramp of the delicate lady, for the inflammatory pleuriſy of a nut-brown country girl. If both expreſſed pain on the ſame ſpot or organ, he would, in conſideration of original temperament, along with the concourſe of ſymptoms, reſolve into firſt principles what belonged to each conſtitution; and thus analyze the morbid phenomena, ſo as to give a degree of certainty to his indications of cure, and a deciſion to his practice, that would inſure ſucceſs, if the diſeaſe was at all remediable.

As the human being, in a ſtate of progreſſive improvement and civilization, quits his earthern-floored, ſtraw-clad cottage on the ſkirts of the foreſt, or a creek of the ocean, where his time had been ſpent in hunting

and fiſhing, for the town, where he is to turn himſelf to trade and manufacture, he neceſſarily undergoes a prodigious change of circumſtances. He forſakes a mode of life that had been preſented to him by nature; and in adopting a new ſituation he becomes the creature of art. When occupied in hunting and fiſhing for ſupport, expoſure to the external air in winter and ſummer, gradually endued him with ſuch hardihood and torpor, as to make him proof againſt the extremes of either cold or heat. His diet, well ſuited for the purpoſes of nouriſhment, was ſufficiently palatable, without any of thoſe adventitious luxuries which cookery ſupplies. His blood and juices were not, therefore, inflamed or vitiated by highly-ſeaſoned dainties; and his ſentient ſyſtem, while it was fully excited for all the movements of vital energy, was never raiſed to exceſs by inordinate ſtimulation. By ſpending ſo large a portion of the day out of doors, he enjoyed the full benefit of a pure and unpolluted atmoſphere. The muſcular parts of the body becoming thus firm and flexile from conſtant exerciſe, all his motions are performed with ſtrength, eaſe, and agility. His walk is marked by ſtability, and his running

by ſwiftneſs. Having few avocations to engage his attention, he ſoon acquires uncommon dexterity in all his geſtures and actions. He aſcends the mountain and precipice, or climbs the tree and rock, with equal ſafety and ſpeed: the arrow from his bow is diſcharged with force, and ſure of its mark: the dart and the javelin are alike unerring in his hands. He manages his hook and tackle, as well as his ſkiff, with ſurpriſing knowledge and addreſs; and in the various attitudes of ſwimming, he is accompliſhed, graceful, and unrivalled. Though in his domeſtic tranſactions, he performs all the relative duties of huſband, father, and ſon, he ſeems exempted from the turmoils and cares which theſe connections neceſſarily bring with them in civilized ſociety. The child is early inſtructed to follow and imitate his parent in the ſports and toils of the field, and ſoon learns to earn his own ſubſiſtence. No painful emotions for his ſucceſs in a buſy world, haraſs or perplex the minds of the father and mother, for it does not depend on uncertain patronage or capricious friendſhips. But the young ſavage conſiders it a part of his filial engagements to ſhare his board with his parents, when age

and infirmity have unfitted them for labour. His paſſion for the ſex is temperate, becauſe it meets with no refined allurements, from dreſs, manners, or faſhion, to inflame it beyond bounds. Tacitus, ſpeaking of the manners of the Germans, ſays, "They behave themſelves with the ſtricteſt modeſty, being debauched with no alluring objects, with no provocatives in banqueting." Revenge ſeems the only paſſion carried to extremes, to be attributed chiefly to a ſolitary life. When the ſavage makes love, he is almoſt ſure of a return: he is neither perplexed with doubts or fears, nor tantalized by falſe hopes and promiſes. The damſel of the foreſt is a ſtranger to thoſe airs and duplicities of the coquet and the prude, which characteriſe ſome of the ſiſterhood in every great town. Hence the uncivilized being is free from all thoſe mental diſquietudes, as well as bodily ailments, which are frequently brought on, in both ſexes, by diſappointed love, and an ill-requited paſſion. Thus health and vigor of body, with inſenſibility or paſſive content of mind, are the inheritance of the untutored ſavage; and if his enjoyments are limited, his cares, his pains, and his diſeaſes are alſo few.

If then it be certain that the rude conditions of ſociety furniſh mankind with a hardihood of frame, that is ſuſceptible of few diſeaſes; let us examine man in the poliſhed circle of life, occupied by pleaſure, or buſy in trade and manufacture. His modes of living are in every reſpect the reverſe of the ſavage ſtate: his body and mind are enervated by debilitating powers, that render him unfit for labour or great privations; and his diſeaſes acquire a more diverſified train of phenomena. The huſbandman, in point of conſtitution, may be conſidered as a medium between the two extremes. By his active occupation, his labour, and expoſure in the external air, he partakes of the ſtrength of the barbarian; and a correſponding tone is given to his nervous ſyſtem: his mind is not debauched by effeminacy; while his temperance and moderation ſecure him againſt the diſorders which prevail in faſhionable life.

But as we purſue our enquiry among the inhabitants of large cities, we ſhall obſerve mankind divided into an immenſe variety of perſons; all diſtinct by fortune, by buſineſs, and modes of living; and again, all theſe greatly influenced by original conſtitution and

education. Among ruſtics, and ſtill more among ſavages, there is an univerſal ſameneſs of character. For as the ambition or ingenuity of man finds out for him new employments; theſe, while they draw forth latent talents, call forth alſo new paſſions and deſires: ſo that however much he may be ſtyled the *creature of habit*, he is in many reſpects the *creator* of his own *temperament*. The Indian paddling in his canoe; or the Norwegian ſculling his ſkiff, remain unchanged in their manners; becauſe they return at night to their family, and to intercourſe with their kindred. But embark man at an early age in a large ſhip, ſuch as an Eaſt or Weſt Indiaman, to traverſe the deep as a navigator and ſeaman, and you ſoon find that he changes to a different ſpecies of being, and exhibits traits of a profeſſion, of the moſt ſingular kind, which differ from all others.* This new occupation while it diſtinguiſhes him from all the world beſide, in

* Compare the character which I have drawn of the Britiſh ſeaman, in my preliminary diſcourſe in the firſt volume of MEDICINA NAUTICA, with the Indian in Robertſon's or Raynal's Hiſtory of America; or with the Bond-Street Lounger, as pourtrayed in any modern comedy or novel.

geſture, manner, and addreſs, beſtows alſo a new diſpoſition on his morbid ſtate. His diſeaſes, therefore, ſhow a particular genius and feature, ſuch as are found only among his own claſs, and which ſpring from cauſes peculiar to the ſea life, as ſcurvy, &c.

It has been remarked by ſome acute political arithmeticians, particularly the famous Gregory King, that the marriages in London and other great towns, produce fewer children than thoſe in the country. The reaſons for this difference are very obvious: he gives examples of the fact, and then enumerates the cauſes, which are the following: *

1. The more frequent fornications and adulteries.
2. A greater luxury and intemperance.
3. Greater intenſeneſs to buſineſs.
4. Unhealthfulneſs of the coal ſmoke.
   (He ought to have added, impure air, from hot and crowded rooms.)
5. Greater inequality of age between huſbands and wives.

All theſe cauſes, beſide many others, ſtill hold good in the preſent times. His firſt and

* See his Political Concluſions, printed in Chambers's Eſtimate.

fifth reaſon require ſome explanation, which can be done beſt at this part of my work. It will be allowed on all hands, to be the intention of nature, that years nearly equal ſhould be joined in marriage: and were mankind left to themſelves this would be the caſe. But art and faſhion have become dictators to matrimony in this venal age. The young man of the preſent day, muſt begin the world for himſelf; and like a knight errant in romance, muſt fight his way to a fortune, before he dares to take a wife. It is too often the caſe, that the ſordid parent winks at the ſon's indiſcretions with the ſex, rather than conſent that he ſhould marry the woman he loves, without a rich dower. And while by this growing cuſtom, a certain number of defenceleſs females are doomed to all the horrors of proſtitution, in order to gratify the paſſions of the young, and the avarice of the old, it is one grand ſtep to the degeneracy of the ſpecies. It is thus the beſt years of manhood paſs away before marriage is thought of: it then becomes a convenience more than an equal attachment of the parties; and hence we frequently obſerve a difference of thirty years and upwards, when the lady may be ſaid to be rather the miſtreſs, than the

wife of her huſband. Amidſt theſe unnatural unions, it is pleaſing to mention ſome exceptions. Many of the old noble families of the nation, have within theſe few years, married at the prime of life. And it is to be remarked, that theſe marriages have all been noted for happineſs and reciprocal affection: the men being all diſtinguiſhed by worth and ſobriety; as the ladies are by their virtues, accompliſhments and beauty.

When Gregory King made his obſervations, about the year 1696, London contained little more than one half the inhabitants it does at this day. Other great towns throughout the kingdom, have increaſed in like proportion. Now if ſuch effects followed the city and town life in thoſe times, how much greater muſt they be in the preſent. Certain it is, the phyſician of the ſeventeenth century, had not the multitude of *nervous caſes* to treat, which now occupy the profeſſion. It is probable alſo, as far as experience goes, that the proportion of marriages, without children, and the number of miſcarriages in married life, are greatly increaſed; and theſe are chiefly confined to the town lady, or at leaſt to people of better condition. It was a remark

of the ſagacious King, that the ſyſtem of agriculture in his days, was advancing to diminiſh the number of cottagers; but to increaſe the village, and ſtill more the town. If ſuch was the caſe a hundred years ago, how much more reaſon muſt there be now for the obſervation, when it is notorious, that ſome overgrown farmers poſſeſs capitals of twenty or thirty thouſand pounds; and engroſs lands that formerly ſupported twenty or thirty families. The middling claſs of countrymen are, by this practice, annihilated, forced to betake themſelves to trade, and there is no degree of rank left between the affluent farmer and his menial ſervants: thus,

——— a bold peaſantry their country's pride,
When once deſtroy'd can never be ſupplied.

GOLDSMITH.

The lying-in ſtate exhibits ſome of the great diſadvantages of refined life. To the delicate well-bred woman, it is always attended with danger; and the diſeaſes which immediately follow, even a fortunate delivery, are often fatal. The rude conditions are exempted from all theſe. The nervous ſyſtem rendered

ſtrong and reſiſting, ſurmounts the various changes and evolutions of the birth, and ſubſequent lactation, without being much haraſſed or weakened in the ſtruggle. Bountiful nature, unfettered in her operations, and left to herſelf, eaſily accompliſhes her purpoſe. The robuſt ruſtic therefore attends her huſband in the field in a few days; while the genteel lady is ſtretched on her couch, often a prey to ſome nervous affection, but always ſlow in convaleſcence.

Again, the wives of the countryman and ſavage ſeldom fail in being mothers of a numerous offspring. But ſterility, or what is next to it, premature birth, are common evils in towns and cities. Ninety-nine caſes of abortion, out of the hundred, may be imputed to a relaxed nervous frame; either from hereditary debility, an improper education in childhood, or other cauſes that are known to weaken the nervous ſyſtem. Does not every woman know how quickly frights and alarms bring on miſcarriages? In a vigorous conſtitution, accompanied with a healthful ſet of nerves, ſuch cauſes can do no harm; but where the ſenſibility trembles at every breath, the ſtate of pregnancy is attended with conſtant terror and dread.

CHAPTER II.

The medical deſcription of the inhabitants of a town or city; being an analyſis of ſociety.

In order to bring detached facts into a general view, I ſhall divide the inhabitants of a large town into the following claſſes, and give a conciſe hiſtory of each, ſo far as it may be neceſſary to ſhew how buſineſs, cuſtoms and manners, influence health.

Claſs 1. Literary men.
2. Men of buſineſs.
3. The idle and diſſipated.
4. The artificer and manufacturer.
5. Thoſe employed in drudgery.
6. Perſons returned from the colonies.
7. The female ſex, conſiſting of the higher, middling, and lower orders of women.

1. Literary men. The philoſopher and man of letters, who devote moſt of their time to ſtudy, muſt lead a ſedentary life. The perſon who thinks and reflects much,

muſt retire; and retirement neceſſarily abſtracts from exerciſe and amuſement. To be ſhut up in a cloſe room, little expoſed to a free and pure air out of doors, ſoon induces a ſallowneſs of countenance; and as want of exerciſe accompanies this confinement, the muſcular power is diminiſhed, the fleſhy parts grow ſoft and flabby, and general debility is the conſequence. Few men attached to literary purſuits are active, ſtrong, and athletic: as if ſtudy was incompatible with bodily exertion, the geſture of a thoughtful man is always ſolemn; and his pace and motions are meaſured and uniform when he walks abroad. The poſture of the body in a ſtudious man at his deſk, is unfavourable to health. The lungs are ſeldom expanded by full inſpiration; and while the bronchial cells are not duly ſtimulated by the powerful influx of an oxygenized atmoſphere, the whole pulmonary organs loſe their vigour, and the blood that floridity which is neceſſary for vital energy and a glowing complexion. All the ſecretions, and their excretories, fall into inaction from want of muſcular motion. By little recreation, and no change of objects to relieve the attention, the whole nervous ſyſtem

ſinks into liſtleſsneſs and inactivity. The mind itſelf, by purſuing one train of thought, and poring too long over the ſame ſubject, becomes torpid to external agents: and an undue mental exertion ſeems to ſubtract from the body much of that ſtimulation which is required for many operations in the animal economy, particularly what belongs to emotion and paſſion. The powers of digeſtion, with all the viſcera ſubſervient to them, partake in a particular manner of this derangement, and grow unequal to their office. The debility and inactivity which take place in the chylopoeitic organs, react on the nervous part of the frame; and the faculties of intellect, as ſympathizing in a great degree, with all theſe highly ſenſible bowels, are influenced by the general diſorder. Hence the numerous inſtances of dyſpepſia, hypochondriaſis and melancholia, in the literary character.

But it is to be ſuppoſed, that all men who poſſeſs genius, and thoſe mental qualifications which prompt them to literary attainments and purſuits, are endued by nature with more than uſual ſenſibility of nervous ſyſtem. And there are moral cauſes to which they are expoſed beyond others, that may have a large

ſhare in the production of their indiſpoſitions. The man who ſtudies and writes for his bread, often depends on a precarious ſubſiſtence; ſometimes the cold charity of an inſolent bookſeller: a mind of fine feeling, under the preſſure of theſe circumſtances, muſt frequently undergo the moſt poignant ſufferings. Such ſeem to be the chief cauſes which give a decided character to the prediſpoſition and diſeaſes of literary men. To this claſs properly belong all the learned profeſſions; and all thoſe who cultivate the fine arts, either for a livelihood or amuſement.

2. Men of buſineſs. The ſubjects of this claſs are very numerous in all our great towns. It includes all thoſe engaged in trade: many of them, no doubt, have much active bodily exerciſe; but that part of them confined to the counting-houſe and ſhop, cannot be ſaid to enjoy the advantages of air and activity, as requiſite for vigour of body. The poſture of leaning over a deſk, contracts the motion of the lungs, and impedes the functions of the ſtomach. Theſe perſons are commonly pale and ſallow, ſoft-fibred, and of a ſlender make. Not a few of them behind the counter, approach in external form towards the female

conſtitution; and they ſeem to borrow from their fair cuſtomers an effeminacy of manners, and a ſmallneſs of voice, that ſometimes make their ſex doubtful. Such degeneracies in corporeal ſtructure, cannot fail of engendering a prediſpoſition to diſeaſes of the nervous kind. It is ſurpriſing to ſee and hear with what addreſs and loquacity ſome of theſe *little beings* in London, ſet off their wares; as if there were a neceſſity for a vender of ſilk and muſlin to be ſoft as the commodity he deals in. You will perceive them to wheedle the buyers of goods out of their money, by a kind of faſcination. Yet it has often been matter of wonder to me, how a lady of ſpirit can liſten to the prattle of theſe manikins without diſguſt; more eſpecially when it is conſidered that they have ſupplanted the ſex in an employment which is their birth-right, and are devouring that bread which belongs to thouſands of poor women, who are thereby conſigned to a life of drudgery, if not of wretchedneſs.

But the man of buſineſs, in this commercial age, is not always to be eſtimated a correct liver: luxury follows hard upon gain. However punctually the ledger may be kept in the

fore part of the day, the tavern too often has its ſhare of the evening. The perſon who has any thing to ſell, very naturally praiſes the quality of his goods; and as he has daily to diſpoſe of the like aſſortment, he ſoon acquires a kind of phraſeology and eloquence in making a bargin. This ſort of converſation is always enlivened by ſomething to drink: the vender knows well how liquor dilates the heart, ſo that if he can perſuade his cuſtomer to drink a bottle of wine, he is almoſt ſure of getting his price. This is what makes the trading town ſo full of taverns: hence thoſe frequent inſtances of nervous and bilious complaints which follow habitual inebriation, to be daily met with in medical practice.

Mankind when in purſuit of money, do not give themſelves much trouble about intellectual attainments. The man of buſineſs however fortunate he may have been in the acquiſition of wealth, is therefore little fitted to enjoy retirement; for riches do not bring content. When he comes to retire he is of all men the leaſt ſatisfied; for his eaſy circumſtances become the root of all his evils; and from having no longer any motive for action, he falls a cer-

tain prey to low ſpirits. Theſe are the perſons in this age, when riches are ſo generally diffuſed, that make up the bulk of hypochondriacs in this country. So certain it is, that happineſs in this ſtate of being, rather conſiſts in the purſuit, than in the poſſeſſion of our object.

All thoſe employed in the public offices of government, and in the houſes of trading companies and banks, come within this claſs: they are all diſtinguiſhed by a ſedentary method of life within doors; and when they paſs the middle age, are often troubled with indigeſtion and low ſpirits.

3. The idle and diſſipated. This is alſo a numerous claſs in every great town. Theſe perſons are the ſubjects of diſeaſes which originate chiefly from exceſs and debauch; and are not unfrequently ſpectacles of miſery the moſt humiliating to human nature. Such diſorders appear eſpecially in the prime of life; often in early youth; and if they are not fatal before forty, they introduce premature ſenility, decrepitude and fatuity. A large city or town may be truly called a hot-bed for the paſſions: all the vices that more particularly enervate the conſtitution and injure health, can be there practiſed long without ſuſpicion or reſtraint, and

indulged to the utmoſt: thus the young and inexperienced are quickly initiated into every faſhionable folly, and a vortex of diſſipation. The ſexual appetite is prematurely excited by the numerous hordes of unfortunate women that are permitted to range the ſtreets. The powers of procreation are thus weakened beyond recovery, before the body has acquired its full ſtability and growth; and the vigor of conſtitution as well as the faculties of mind are ſhook to the very centre. When ſuch debilitated beings have progeny, the ſins of the father are viſited upon the children, and they appear a race of invalids from their birth.

But as there is a diſeaſe the peculiar ſcourge of unlawful embraces, ſo its effects on health are equally diſguſting and dangerous. The inconſiderate young man who contracts this complaint, from delicacy often conceals his misfortune till it has gained a decree of virulence not to be deſcribed. This diſtreſs is frequently aggravated by mental ſenſibility; and families and connections are at once involved in general calamity. In the advanced ſtage, hideous deformity of body is often the conſequence; but in all the gradations of this infection, a long and rigorous

courſe of mercury is the only remedy to be depended on. Mercury, rendered antivenereal and poiſonous by oxydation with the different acids, is conſidered a certain cure for ſyphilis; but its exhibition is ſometimes fatal to the conſtitution, and conſtantly leaves behind it a weakened frame of nerves, and a diſpoſition of ſtomach and bowels liable to ſpaſmodic affections.

All full livers and drunkards come within this claſs. Frequent ſurfeits from high-ſeaſoned food; and frequent intoxication from vinous or ſpiritous potations, commit dreadful ravages on the human body and mind. It is a misfortune in poliſhed ſociety, that many indulge in theſe exceſſes without thinking they are doing wrong; and often ſink into the grave by diſeaſes of their own creating, without being warned of their miſconduct. The diſguſting propenſity to luxurious eating fortunately is ſeldom the caſe with the fair ſex; but where it happens, a train of nervous and bilious complaints are more certainly the conſequence. To devour a large quantity of food is only a bad habit; moſt perſons could be nouriſhed with half what they feed on; ſo that not only temperance as to quality, but

abſtemiouſneſs as to quantity, is one of the golden rules of health.

4. The artificer and manufacturer. The numbers of this claſs are daily increaſing; the natural effect of the vaſt commercial wealth of the united kingdoms. The artiſan and manufacturer are not confined to the town; for almoſt every village throughout the country poſſeſſes ſome branch of manufacture. Here again all the effects of a ſedentary life appear,—the uneaſy poſture and unwholeſome air. But many ſpecies of manufacture are unhealthful from noxious metallic fumes, to which the workmen are expoſed, ſuch as thoſe of mercury, lead, copper, &c. The exhauſting heats of furnaces, ſmelting houſes, laboratories, ovens, boilers, &c. in different kinds of employments, have their diſeaſes; but the moſt noxious are thoſe which fix on the nervous ſyſtem. Thoſe trades alſo, where the articles wrought give out conſiderable quantities of unreſpirable gaſes, from the decompoſition of animal and vegetable matter, are inſalubrious; the workmen commonly look pale, ſallow, and dejected.

Such perſons as are expoſed to the heat of large fires in their labour, and undergo

ſudden changes of temperature, cannot fail of being ſoon exhauſted in conſtitution. As far as I have obtained information, it does not appear they live long. Their profuſe perſpirations, induced by hard work, as well as by great heats, give moſt of them a propenſity to drinking. Were they always to quench their thirſt by water only, the exceſſive labour might be borne for a length of time; but the ſtrongeſt malt liquors, often mixed with ſpirits, are the common drinks of men employed near fires.

But I have alſo met with many ſevere ſtomach complaints among forge-men, where there could be no ſuſpicion of irregular living. Twenty of this kind occurred in the neighbourhood of Newcaſtle in the laſt three years, and ſome of the number proved fatal. The ſtanding poſture when long continued is very hurtful to the bowels, as often happens among blacksmiths.

I do not find that the pitmen in the coal-mines of this diſtrict are liable to any particular diſeaſes; when temperate in drinking, they commonly live to a great age.

5. Thoſe employed in drudgery. This claſs is compoſed of both ſexes; they grow

ſtrong and broad-ſhouldered from labour, provided it is chiefly out of doors. But in this claſs we often obſerve many addicted to drunkenneſs; and I much doubt if their work is ever ſo ſevere as to injure health, when they are regular livers.

It may however be conſidered as a fact, ſubſtantiated by the daily experience of phyſicians, that all the diſeaſes which are cauſed by hard labour, poverty, and want, are much eaſier of cure, than thoſe which ariſe from indolence, luxury, and debauch. A conſtitution that has been weakened by ſubtraction of nouriſhment, may ſoon have its energies reſtored by ſuitable regimen, diet, and medicine: but the frame that has been waſted of its vital powers, by exceſſive ſtimuli and debilitating pleaſures, has ſeldom or never been brought to its former ſtrength.

6. Perſons returned from the colonies. It is very common in the preſent times, for men brought up to buſineſs, to ſpend a number of years in the colonies, till they are able to return with fortunes. They may therefore be conſidered as a diſtinct claſs, in this enquiry. Theſe perſons bring with them to Britain, indelible marks of the effect of the

climates they have lived in: dyſpeptic complaints, and all their nervous accompaniments, are the never-failing diſeaſes of this enervated people. The tropical heat, and luxurious modes of living, are chiefly to be blamed in the production of ſuch bilious and nervous ailments; and they have uſually taken ſo deep a root in the conſtitution, that they are rather aggravated than relieved by our variable atmoſphere. The foggy weather, and fickle temperature of Britain, keep the feeble nerves of theſe relaxed frames in a ſtate of conſtant irritation.

The diſeaſes of tropical climates, but particularly the fevers of ſome countries, weaken the nervous ſyſtem, produce great mobility, and a diſpoſition to ſpaſmodic complaints. Hence the chylopoeitic viſcera become the ſeat of ſo many painful affections; and the word *bilious*, has grown a theme of conſtant converſation in England, as well as in the colonies.

7. The female ſex. Nature has endued the female conſtitution with greater delicacy and ſenſibility than the male, as deſtined for a different occupation in life. But faſhionable manners have ſhamefully miſtaken the pur-

poſes of nature; and the modern ſyſtem of education, for the fair ſex, has been to refine on this tenderneſs of frame, and to induce a debility of body, from the cradle upwards, ſo as to make feeble woman rather a ſubject for medical diſquiſition, than the healthful companion of our cares. The medical literature of the preſent day, affords abundant, but melancholy proofs of the juſtneſs of this remark. Their whole tenor of living, and domeſtic economy, are at variance with health. The female infant before ſhe can well crawl along the floor, is taught ſome employment that will encourage her to ſit, to ſtoop, or to walk two-fold. That it ſhould be rude for an innocent young girl to run about with her brother, to partake of his ſports, and to exerciſe herſelf with equal freedom, is a maxim only worthy of ſome inſipid goſſip, who has the emolument of the family phyſician and apothecary ſolely in view. A man of fortune and wealth, when he builds a ſtable or a dog-kennel for his horſes or hounds, takes care that theſe companions of his field-ſports ſhall be duly preſerved ſound in wind and limb, by frequent exerciſe out of doors, when he does not hunt. But in no part of his premiſes do

you ſee a gymnaſium for his children. If the ingenious arts are chiefly to be valued as they increaſe the ſum of human happineſs, we thus make it a misfortune to have a houſe over our heads, though it may ſhelter us from the froſt, the tempeſt and the rain; for it too often becomes the means of depriving us of health, when it prevents exerciſe and excludes pure air. But we indulge our boys to yoke their go-carts, and to ride on long rods, while little miſs muſt have her more delicate limbs crampt by ſitting the whole day dreſſing a doll. Ancient cuſtom has been pleaded in favour of theſe amuſements for boys, as we read in Horace: but it is no where recorded that the infancy of Portia, Arria, and Agrippina was ſpent in fitting clothes for a joint baby.

All female employments that are performed in the ſitting poſture, injure health; and are hurtful in proportion to the early age in which they are begun. Few of the ſex are entirely free from this habit.

Women of very moderate fortune, and the wives and daughters of all reputable tradeſmen in this country, may be ſaid to indulge in moſt of the follies of their ſuperiors. They can have their hot cloſe rooms, drink ſtrong

hyſon, and keep late hours, as well as a dutcheſs. The female conſtitution, therefore, furniſhed by nature with peculiar delicacy and feeling, ſoft in its muſcular fibre, and eaſily acted upon by ſtimuli, has all its native tenderneſs increaſed by artificial refinements. Hence the diſeaſes of which we now treat, are in a manner the inheritance of the fair ſex: when to theſe we ſuperadd all the prepoſterous cuſtoms of faſhionable life, need we wonder at the numerous inſtances of bad health and feeble exiſtence, ſo often to be met with among them.

One of the curſes which was pronounced againſt ſome of the Jewiſh mothers, is unfortunately realized among many of our fair countrywomen. "*The tender and delicate* "*woman among you, which would not venture* "*to ſet the ſole of her foot upon the ground, for* "*delicateneſs and tenderneſs, her eye ſhall be* "*evil towards the huſband of her boſom, and* "*towards her ſon, and towards her daugh-* "*ter.*" *

No text in ſcripture, or any other book, ever conveyed a more juſt cenſure on the in-

* Deuteronomy, chap. xxxviii. v. 56.

diſcreet conduct of a parent to the offspring. From having injured her own frame by refinements in living, the mother thus ſows the ſeeds of diſeaſe in the conſtitutions of her children: hence a weak body, delicate nerves, and their conſequence, a ſickly exiſtence, become hereditary. Such may be here called a fair interpretation of thoſe emphatic expreſſions, "*Her eye ſhall be evil towards the huſ-*
"*band of her boſom, and towards her ſon, and*
"*towards her daughter!*"

CHAPTER III.

Remote cauſes of nervous diſeaſes, &c.

The remote cauſes of nervous diſeaſes are chiefly to be ſought for in populous towns; and increaſe in proportion to the deviation from ſimplicity of living. The ſtate of civilized mankind is thus expoſed to cauſes of bad health, which have no power among rude nations, viz.: In

1. Air.
2. Exerciſe.
3. Food.
4. Cloathing.
5. Paſſions of the mind.
6. Intenſe ſtudy.
7. Lactation.
8. Miſcarriages and premature labours, &c.
9. Climate.
10. Medicine.

1. Air. A pure atmoſphere is of the firſt importance to ſuſtain animal life in full health

and perfection. Mankind in the earlieſt ages of the world muſt have ſoon learned this. Although they had no knowledge of either the chemical qualities or the mechanical properties of common air, ſome particular deviation from the uſual ſtandard, was reckoned the chief cauſe of epidemic fevers. The ſenſes in a great meaſure were the beſt teſts of a tainted atmoſphere, eſpecially that of ſmell: and where large collections of animal and vegetable filth were found in a ſtate of corruption, offenſive effluvia would be quickly detected, and would be avoided. But a more correct method of judging of the medium in which we breathe is now obtained from chemical philoſophy; for independent of any noxious ſubſtance which may impregnate the atmoſphere, as ariſing from the decompoſition of animal or vegetable matter, or other ſources, it is liable to become noxious to life, by whatever means the *oxygen* or reſpirable portion is deſtroyed, leſſened, or abſtracted. Such is the caſe when a number of perſons are confined in a ſmall place; or where large fires are kept, and the doors and windows made too cloſe. It is thus the city or populous town is rendered leſs ſalubrious than the

country. Narrow lanes, high buildings and houſes, filthy kennels, ſmall apartments, huge warehouſes, manufacturing eſtabliſhments, cellars under ground, conſumption of fuel, and a large population, are ſo many ſources whence the air is contaminated. The ſun-ſhine ſcarcely beams on any window of a houſe in town: the ventilation of the upper parts of the building is imperfect; but the lower ſtories, particularly what is under ground, can receive no pure portion at all. The buſineſs of the whole inhabitants almoſt confines them within doors; ſo that the very complexion and countenance diſcover a citizen. It is familiar to people bred in great towns to remark, how imperfectly all the trees and ſhrubs grow in their little gardens. Nothing but the foul atmoſphere is to be blamed for this; for the richeſt ſoil cannot correct or prevent ſuch rickety productions. Animal growth labours under the ſame diſadvantages as the vegetable tribe. A deficiency of colour, in old times, ſuggeſted to phyſicians the predominance of ſome humour in the body: and from this cauſe particular names of temperament were aſſigned to different people. But we now impute a delicate look, and a pale face, to confinement within doors, and to breathing an impure air.

That portion of the atmoſphere which tinges the ſkin with a lively hue, and the blood with a florid colour, is known to be oxygen. Yet ſo unnatural and perverted are faſhionable opinions on this ſubject, that a blooming complexion is thought to indicate low life and vulgarity in breeding. What a depraved mode of thinking! What a falſe ſtandard for beauty; to prefer a ſickly ſallow hue of the countenance to the roſes of health! And yet ſeek to imitate them by artificial means. This wan and pallid complexion, or negation of colour, is always an indication of debility, and uſually accompanies bad health, from whatever cauſe, but chiefly imperfect action of the digeſtive powers. The functions of reſpiration and digeſtion have therefore ſome dependence on one another. Some perſons give the name of *bilious* to theſe ſallow looks: but they certainly often appear where there is no ſuffuſion of bile; and in this ſtage are to be imputed to deficient oxygenizement of the blood.

But it is the known effect of the oxygenous principle of the atmoſphere, when duly inhaled from a current breeze, not only to ſaturate the blood with floridity, but to exhilirate the ſpirits in a high degree; invigorate and

redden the muſcular fibre; beſtow energy on every nerve, and call forth at once mental and corporeal ſtrength. Moſt perſons muſt have taken notice of that languor, drowſineſs, and diſlike to motion, which are felt in a cloſe, warm, and crowded room. Inſtances have come within our own obſervation, where the candles ſeemed ſcarcely to burn, and where half of the company was yawning at the other, without knowing the cauſe. Should any philoſopher, who might pity the ſomnolency of the party, attempt to open a ſaſh by way of correcting the air, his politeneſs would be apt to give offence. What effect the popular lectures of Mr Davy, and thoſe delivered in provincial towns, may have on ſuch aſſemblies, time only can ſhew. A modern rout is certainly one of the completeſt examples of a warm crouded houſe. The good lady, who entertains for the evening, commonly thinks herſelf honoured in proportion to the number of viſitors; and the gueſts find themſelves ſupplied with every elegance, except a pure cool zephyr. The warm full theatre, or dancing aſſembly, if not duly perflated, like the rout, are ſo many marts of bad health. * Im-

* Perſons who are fond of frequenting thoſe un-

pure air ſaps the conſtitution by ſlow approaches; but no miner more certainly carries his point at laſt. I hope Mr Davy * is duly attended by all thoſe matrons who keep boarding ſchools for young ladies, in and near London.

One of the great misfortunes which ſome ſpecies of manufacture have brought on this country, is the employment of children, before the body has attained its full growth. During infancy and childhood, and till the human frame has acquired its full ſtature, it would appear, that more pure air is required for the purpoſes of health than at a remoter period of life. The heart of the child much ſurpaſſes that of the adult in the frequency of its pulſations; and every movement of the body is more conſtant and quicker, ſo that it ſeems to be never at reſt, but during ſleep. Hence the greater expenditure of vital air. The child who is early employed in a woollen

wholeſome crowds ought to be informed that nothing is ſo indelicate as to breathe *reſpired air*. To drink of the ſame cup is the height of politeneſs compared with this cuſtom.

* Lecturer on Chemiſtry, at the New Inſtitution, and highly celebrated for his diſcoveries in the ſcience.

or cotton manufactory, is to the village plough-boy, what the town-lady is to the country girl. They are both examples of nature's precepts being diſobeyed: for to be ſtewed in foul air, is the ſame in effect, wherever it happens.

A warm unventilated nurſery is a nuiſance of the firſt magnitude. Nurſes and ſervants have too often the ſole ſuperintendance of theſe apartments: faſhionable mothers at leaſt, as ſome may be juſtly called, ſeldom viſit nurſeries. Bad health, particularly among the delicate children, is too often brought on by a cloſe ſleeping place. It is only when the weather is extremely cold, that a fire ſhould be permitted in theſe apartments; for during the ſleeping ſtate, the body is not ſenſible of the deficient purity of air; and it may be ſubtracted altogether, without any ſtruggle being obſerved, and without the body being waked. It is thus infants are ſo eaſily ſuffocated or overlaid: as the air becomes more impure the ſtupor increaſes, till reſpiration ſtops; and the child is always found in the ſleeping poſture. * Sleep is not only the image of death, but it ſeems a ſtep towards it.

* In 1801, while I reſided at Plymouth Dock, a

The modern practice of confining children to ſleep in a crib, till they are three or four years of age, is highly commendable: it has thus all the advantages of the breaſt to put it to ſleep, and is in no danger of being overlaid. The ſize of the bed afterwards ſhould ſtill be proportioned to the child; and they ſhould never be permitted to lie with a grown perſon. The convulſions of infants, which are purely a nervous affection, we know to be often brought on by want of ventilation; and we naturally expoſe them at a window for recovery, as we do with a lady fainting in a crowded room.

A few years ago, the numerous deaths which happened in a foundling hoſpital in

houſe adjoining took fire, in an upper apartment of which, that had no chimney, a poor woman with eight children periſhed. They were all found in bed, in the *ſleeping poſture;* and had been ſuffocated, from the flame ſurrounding the room, and exhauſting the air, for no part of them was ſcorched. During the alarm no perſon thought of this poor family, otherwiſe the whole of them might have been eaſily reſcued, for only a portion of the premiſes was conſumed. It is probable that none of them waked, as their cries would have been heard, the houſe being only of two low ſtories, and this garret room.

Dublin, made a great noiſe in this country. On inquiry, it was found that foul air had the chief ſhare in this uncommon mortality. Some hoſpitals in Paris, about the ſame time, were ſcenes of the like deſtruction to infant life. Now children who ſurvive theſe nurſeries and hoſpitals, or dungeons as they may be called, are ſo ſtinted in their health, that they are unfit for every occupation that requires ſtrength; and ſhould they have families, hereditary debility and deformity are the lot of the offspring. Of ſuch vaſt importance is pure atmoſpheric air to the growth and health of the human body.

The following inſtance of a ſhocking calamity, ſhews how neceſſary it is, for all deſcriptions of perſons to be informed, that *without a conſtant ſupply of pure air, life cannot be ſuſtained.*

In 1797-8, a ſmall paſſage veſſel belonging to Southampton, had on board *ſeventy* men, women, and children, coming from Jerſey; among whom were many ſoldiers and their families. It began to blow freſh breezes, and for the ſafety of his ſloop, the maſter laid the hatches over, and covered them with a tarpaulin, which he battoned down, for better

ſecurity. When the veſſel came within the iſle of Wight, the hatches were opened, but, dreadful to be told! *the whole of the paſſengers were found dead!!!* The maſter, who did all this through ignorance of the effects of *foul air*, became mad, and died ſoon after.

2. Exerciſe. This aſſiſtant of health cannot well be ſaid to form a part of the recreations or amuſements of a great town. The inhabitants have neither been taught to wiſh for it, nor how to enjoy it. A formal walk before dinner to call on a few friends, or to make ſome purchaſes at a ſhop, bounds the travels and excurſions of thouſands of women in London, and other populous cities. If the ſtreets are diſagreeable to walk, or ſhould the leaſt fatigue be felt, the remainder of the journey is performed in a coach. The male part of the community do not much avail themſelves of greater advantages. Can a few ſtrides to the office or counting-houſe be deemed exerciſe? Or can a lounge in Bond-ſtreet be conſidered as a parade for maſculine health? The whole buſineſs of a town-life is tranſacted within doors: ſcarcely a houſe in London has an area attached to it ſufficient for the ſports of a child, where it may

ſtretch its limbs, and ramble about. Where there is no ſpace out of doors appropriated for the play and diverſions of children, ſuch as running, leaping, and wreſtling, a manly vigour of body can never be acquired. The ſtature may, no doubt, attain its common height; but can there be firmneſs of muſcle, or energy of nerve, in ſuch a frame? Like the plant that is reared in a hot-houſe, it may grow tall and look fair, but the firſt gale of wind lays it low. The city child, like the dwarf, being denied the free motion of its limbs, is ſecluded from play-mates of its own age, and ſoon imitates the manners of its ſeniors. It thus inſenſibly acquires a volubility of tongue, and fluency of ſpeech, that appear like premature talent of mind. But this early ſhow of intellect, is not ſtable in its growth; and ſuch a youth ſeems to learn nothing after fourteen. But the child educated in the country, who has no bounds ſet to his walks and ſports, is indifferent to ſtudy and all mental acquirements: his great flow of ſpirits gives him conſtant amuſement, and his good health keeps his limbs in continual motion. The body having thus copied the dictates of nature to its full growth, will be better pre-

pared by the ſoundneſs of its texture for thoſe intellectual recreations, of either elegance or utility, that are to be the future employment of life. The town and the country in this reſpect may be ſaid to exchange commodities. The youth bred in the village will have the beſt chance for ſound health and pure morals, and will find the city the beſt mart for theſe virtues. But as a vigorous corporeal ſtructure, as well as intellectual excellence, cannot remain long in the town without degeneracy, perhaps not more than three generations; ſo if theſe endowments are to be preſerved in the ſame family, they are only to be recruited by reſuming the habits and amuſements of a country life.

Broad ſhoulders, a full cheſt, and muſcular limbs, are concomitants of exerciſe and labour; they mark what is called the *brawny form.* The limb or muſcle that is often exerciſed and put in motion, expands from the influx of blood that is thereby directed to its veſſels; which increaſed influx of blood diſtends the arteries and veins; ſupplies the fleſhy parts with a larger proportion of nutriment, and ultimately adds bulk, firmneſs, and ſtrength, to the moving fibre. During active

muſcular exerciſe there is a great expenditure of the fluids: the more aqueous and volatile are thrown off or exhaled, by ſweat and inſenſible perſpiration; while an increaſe of appetite to ſupply the waſted juices, is a neceſſary effect of this expenditure. The organs of digeſtion alſo gain new vigour, and perform their office with more facility and expedition: the food aſſimilates more readily with the other ſecretions, and is propelled with greater rapidity along the inteſtinal tube.

By competent exerciſe, the blood that returns to the heart from the extremities, is duly liberated of certain parts intended to be thrown off; and acquires in the lungs freſh qualities from the inſpired atmoſphere. It is probable this function of the pulmonary organs could not go on in a manner conſiſtent with health, without ſome degree of agitation, ſuch as we obſerve during the increaſed motion of the cheſt. It is thus exerciſe out of doors, beſtows on the countenance the animated bloom of health. The mental faculties receive a like degree of energy from active bodily motion; it ſhifts the train of thought from one object to another, forces new impreſſions on ſenſation, and a change of ideas is the conſequence.

All the nations of antiquity, of which we read, who truſted to the art of war for ſafety, found it expedient to train their youth to hardy and active exerciſes, for the purpoſe of making them ſoldiers. The Olympic games, Gymnaſium, Palæſtra, Campus Martius, Circus and Arena, were ſo many places appropriated to the diverſions and ſhows of chariot-racing, horſe-racing, running, wreſtling, fencing, throwing the coit, &c. Without ſtated exhibitions of this ſort, the inhabitants of large cities could not be well inured to bodily fatigue, or become athletic. It was alſo neceſſary to keep up emulation among young men, and to grant marks of diſtinction to thoſe who excelled in theſe atchievements. Xenophon, in drawing the character of a finiſhed general, lays great ſtreſs on the pains taken by his hero to detach his officers on hunting parties, that they might learn to bear thirſt, hunger, inclement weather and danger. * He muſt know little of a military life, who would truſt the defence of a country to a ſedentary people. All the qualifications of a ſoldier are wanting among ſuch perſons. What drilling or train-

* Cyropædia.

ing could ever fit ſuch men to ſleep with impunity on the wet turf, to bear cold, fatigue, and all the privations peculiar to actual war?

Dr Gillies, in his animated deſcription of the Olympic games and Gymnaſtic exerciſes of the Greeks, ſays, "Bodily ſtrength and "agility were accompanied by health and "vigour of conſtitution. Their athletic hardi- "neſs bore without inconvenience, the viciſſi- "tudes of cold and heat. Even in the ſcorch- "ing heat of July, (for that was the ſeaſon "of the Olympic games,) they received bare- "headed the direct rays of the ſun. And the "firm organization acquired by perpetual ex- "erciſe, counteracted that fatal propenſity to "vicious indulgence, too natural to their "voluptuous climate, and produced thoſe "inimitable models of ſtrength and beauty, "which are ſo deſervedly admired in the pre- "cious remains of Grecian ſtatuary. *There* "*is a courage depending on nerves and blood*, "which was improved to the higheſt pitch "among the Greeks." *

If therefore exerciſe tends ſo powerfully to ſtrengthen the body and exalt the courage,

* Hiſtory of Greece, chap. vi.

how fatal to health muſt be the total privation of it? And if there is one diſeaſe more than another that is induced by indolence, by ſloth, and want of active motion, it is that train of nervous weakneſſes, which puts on the form of every other complaint, and becomes one of the greateſt ſtings to human happineſs.

3. Food. Luxurious living, joined to other cauſes, has a manifeſt tendency to induce nervous and bilious derangement. When a large quantity of rich food is conſumed, heightened to the palate by all the arts of cookery, more than nature demands muſt be taken down. A variety of diſhes alſo invites to inordinate appetite and gluttony. The organs of digeſtion are thus oppreſſed and weakened by the ſurplus; the liver in particular is enlarged in its volume: the blood is charged with a richer quality, and every veſſel and gland ſtimulated to exceſs. The nervous ſyſtem is alſo preternaturally excited, and grows highly ſuſceptible of ſtimulus, and eaſily affected in mind by pleaſurable ſenſation. If a life of indolence is led under luxuriant diet, joined to the liberal uſe of fermented liquors, together they form that habit which conſtitutes the *voluptuary*. It is cha-

racteriſed by a florid complexion, ſparkling eyes, an unmeaning ſimper, ſoftneſs of fleſh, and fullneſs of blood, rather than obeſity. The mind is light, indolent, and indifferent to every thing but pleaſure. A perſon of this deſcription is perpetually in purſuit of ſome ſelfiſh indulgence; courts the acquaintance of all who keep good tables; flatters the weak part of the ſiſterhood, but ſhuns the ſociety of ſenſible women; and calls philoſophers inſipid companions, and diſturbers of a party. Such a man is remarkable for a great flow of ſpirits at the convivial board: but his round of delights is not laſting. He that laughs and drinks with every one, grows ſad in time; and early decrepitude, and nervous debility, are his certain portion. As his youth was remarkable for good health and levity of diſpoſition, ſo his age is tortured by low ſpirits and paralytic weakneſs.

There are ſome perſons of the nervous temperament, that are much addicted to high ſeaſoned food, which I call luxurious living. This cuſtom is often firſt acquired by indulging in the uſe of hot articles, with a view to obviate flatulence, and other dyſpeptic feelings; but it inſenſibly gains ground, and by

repetition it is confirmed into habit; and the excitability, or vital power of the ſtomach, is ſpeedily exhauſted and worn out. Such perſons commonly die of apoplexy, after a voracious repaſt, or linger a while under incurable palſies of the limbs and other organs, and idiotiſm.

When perſons, after a courſe of high living, are compelled to feed on a leſs generous diet, we often meet with painful ſtomach complaints, and low ſpirits. In theſe caſes the organs of digeſtion ſeem to be ſo much weakened by the previous exceſs, that poor fare is unable to ſtimulate them to healthful action. Under ſuch circumſtances men are apt to ſeek relief from ſpiritous liquors, which quickly terminate exiſtence, by aggravating all their complaints.

The uſe of TEA in this country, as an article of diet, comes under this head. The conſumption of the Chineſe plant is enormous throughout the united kingdoms: it is a beverage well ſuited to the taſte of an indolent and voluptuous age. To the glutton it affords a grateful diluent after a voracious dinner; and from being drunk warm, it gives a ſoothing ſtimulus to the ſtomach of the drunkard.

But however agreeable may be its immediate flavour, the ultimate effects are debility and nervous diſeaſes. There may be conditions of health, indeed, where tea can do no harm, ſuch as in the ſtrong and athletic; but it is particularly hurtful to the female conſtitution; to all perſons who poſſeſs the hereditary predispoſition to dyſpepſia, and all the diſeaſes with which it is aſſociated; to gout, and to thoſe who are naturally weak nerved. If this obſervation is juſt, we may account for many taking it with impunity, and holding out the deleterious qualities of tea as a medical chimera, conjured up to magnify the importance of phyſic, and to frighten old women. Fine tea, where the narcotic quality ſeems to be concentrated, when taken in a ſtrong infuſion, by perſons not accuſtomed to it, excites nauſea and vomiting, tremors, cold ſweats, vertigo, dimneſs of ſight, and confuſion of thought. In its more diluted ſtate, ſweetened with ſugar, and ſoftened by the judicious mixture of bland cream, it is grateful to the ſtomach, gives a ſoothing ſenſation as if it lulled pain, exhilirates the ſpirits, produces wakefulneſs, relieves fatigue; and from being taken down

warm, promotes perſpiration, and acts powerfully by the kidneys.

But I have known a number of men and women ſubject to nervous complaints, who could not uſe tea in any form, without feeling a ſudden increaſe of all their unpleaſant ſymptoms, particularly acidity of ſtomach, vertigo, and weakneſs of the eyes. Though fond of tea myſelf, I have ſometimes been obliged to leave it off, by ſuſpecting that it added to my natural ſhortneſs of ſight.

As the uſe of this article in diet extends among the lower orders of the community and the labouring poor, it muſt do the more harm. A man or woman who has to go through much toil or hardſhip, has need of ſubſtantial nouriſhment: but that is not to be obtained from an infuſion of tea. And if the humble returns of their induſtry are expended on this leaf, what remains for the purchaſe of food better adapted to labour? In this caſe tea becomes hurtful, not only from its own narcotic quality, but becauſe that quality acts with double force in a body weakened from other cauſes. This certainly is one great reaſon for the increaſed and increaſing proportion of nervous, bilious, ſpaſmodic, and

ſtomach complaints, &c. appearing among the lower ranks of life. This fact has long been confirmed to me in different countries, and among perſons varying much in their employments. I have lately met with many ſevere and obſtinate caſes among poor tradeſmen and labourers, where it was plain they originated from this cauſe. I alſo think that the uſe of tea often paves the way to habitual dram-drinking among this claſs of ſociety, more than among the better orders.

It is worthy of remark, that the finer the tea, the more it contains of the pernicious quality; hence the greens which are gathered in the bud, or before the leaves fully expand, have with that colour the ſtrongeſt flavour. To ſip frequently of green tea, produces wakefulneſs and gaiety of ſpirits: hence ſome literary men, who protract their ſtudies to a late hour, uſe ſtrong tea, like the late Dr Johnſon, to keep them awake. It alſo poſſeſſes an emetic quality, on which account it can ſeldom be taken in the quantity to induce ſleep. Dr Cullen, of Edinburgh, who was ſubject to gout, ſaid, he never could take it without feeling ſome arthritic affection of his ſtomach; yet many dyſpeptic people find it highly

agreeable, while others feel immediate bad effects from indulging in it.

The nervous ailments of female conſtitutions, which are often induced and aggravated by tea-drinking, in advanced age, are apt to terminate in palſy. And from a concomitant torpor of the abſorbent ſyſtem of veſſels, they alſo very frequently terminate in general dropſy. *Coffee* poſſeſſes the narcotic principle; but in a leſs degree than tea: the ſame diſeaſes follow its uſe, though its hurtful quality is perhaps diminiſhed by roaſting. How far the hot water taken with tea and coffee, increaſes their deleterious effects on the ſtomach and nerves, may depend on natural temperament. Some perſons are in the habit of drinking them very warm, while others prefer them at a lower temperature. The beſt degree I ſhould think, about blood heat.

A number of *aromatic ſubſtances*, which include all the ſpices and peppers, as well as ſome other articles, are in common uſe as *condiments* of diet. It may be part of natural inſtinct, that food to be nouriſhing and agreeable, ſhould be ſapid. Yet the infant at the breaſt ſeeks no addition to his milky ſtream; and it is doubtful to me, if any of the warm

ingredients are uſeful. The tropical ſavage uſes pepper with his vegetable meal, in great quantity. Now this kind of diet is watery and inſipid. Without ſomething ſavoury, he has no pleaſure in eating it; and the ſtimulus of ſeaſoning becomes neceſſary. But the European who imitates this cuſtom, with his turtle and beef ſoup, while he is a reſident in the Eaſt or Weſt Indies, errs egregiouſly from the indications of nature. All dyſpeptic perſons are fond of hot articles. When I hear them call for Cayenne pepper at table, it is not difficult to find out their modes of living. It is a key to the temperament, and facilitates the phyſician's inquiries. But plain fare, ſuch as all dyſpeptics ought to be fed on, needs no aid of this kind: and I differ widely from thoſe medical authorities who inculcate the practice; the whole of them manifeſtly weaken the ſtomach. All the ſpices owe their warm pungency to a volatile oil: but as far as I have correctly watched their effect, inſtead of promoting digeſtion, they evidently diſturb it. They float on the ſurface of the food, and irritate the cardia or upper orifice of the ſtomach, which has the immediate effect of inverting the motion of the muſcular fibres; and then the

flatulence appears by rising upwards, and producing eructation. This belching is said to be salutary, though proved to be a symptom of disease. If these articles are ever admissible at all, it must be in advanced life, when the vigour of the stomach and intestinal canal grow naturally torpid and slow. Of themselves they yield nothing of the nourishing principle. Soy, catchup, and all the warm sauces, increasing daily in number, have the same pernicious effects. But when we hear of a dozen of large bacon hams being melted down into a few pint bottles of condiments, that pamper and poison health, while they destroy what would have been wholesome food for numbers, it is a moral evil of great magnitude, and ought to be prevented. All the hot peppers have also the effect of hurting the teeth, by corroding the enamel.

It is worthy of remark, that condiments of every kind, from custom, become very desirable, till at last no food is relished without them. But it is rather the palate than the stomach to which they are grateful. Some of the peppers are caustic, and cannot fail of injuring, if not corroding the coats of the first passages. Even mustard, though one of the mildest of the condiment kind, is capable, in

the form of a ſinapiſm, of veſicating the ſole of the foot, over which is ſpread the thickeſt epidermis on the whole ſurface of the body. Muſt not ſuch a ſubſtance be hurtful to the delicate ſtomach? To muſtard and pepper I have never accuſtomed myſelf, from infancy upwards; and I remain a proof of the truth of my own doctrine, few perſons being more exempt from dyſpepſia. All theſe articles ought, therefore, to be denied to children, which will be one grand ſtep to make them diſlike every hot ingredient in diet, when they grow up. Should brandy, or thoſe waters which are impregnated with the *kernel flavour*, be mixed with ſauces of any kind, it is evident they muſt be noxious. They are dangerous as being narcotics the moſt enticing of all articles applied to the taſte; and children that are early accuſtomed to ſuch poiſons, will run great hazard of ending their career as ſots and dram-drinkers.

4. Cloathing. In the preſent times, cloathing or dreſs is to be found in the extreme; either too much or too little. It is a proof of the declining vigour of the human frame, when ſo many young men, in this age, are under the neceſſity of being ſwaddled in flannel. An enervated ſtate of body can alone

want this aſſiſtance. But many of the fair ſex have adopted a contrary practice: a few folds of fine muſlin, ſo looſely put on, that the whole dreſs appears to be made for the purpoſe of being thrown aſide, in an inſtant, like a cloak or a ſhawl. Cloathing the body ought to be regulated by the ſeaſon: but the rule muſt vary with the age, conſtitution, and habits of life. There is an intimate connection between the ſtomach and the ſurface of the body: * and as the former is the chief ſeat of nervous affections, what chills the ſkin ſuddenly, is apt to injure the bowels. Eruptions on the ſurface often free the ſtomach from painful complaints; and the repulſion brings them back. This is often the caſe where warm cloathing has been haſtily laid aſide: we obſerve this ſympathy particularly after wet feet, a fact which moſt delicate females know well. The lady of weak health, who may wiſh to diſplay a fine ancle, ſhould be very guarded how ſhe throws off her warm ſocks.

* I lately had a young woman as a patient, ſubject to violent ſtomach complaints, who at different times, ſuffered the loſs of the *whole cuticle*. She was reſtored to perfect health by medicine, and the ſurface of the body is now ſmooth and even.

Many evils befal the ſex from cold feet; ſuch as follow walking abroad with thin ſhoes in damp roads; ſitting long inactive, as in churches and theatres, &c. I have known ſome ſerious nervous ailments brought on by a young lady evading the orders of a judicious parent; and, after being dreſſed, retiring privately to put off the additional petticoat and under ſtockings, that ſhe might dance more lightly. As my plan is to make the female habit healthful by active exerciſe and pure air, ſo I would recommend in addition to theſe precautions, the uſe of half boots, which, with a warm ſpencer, will ſecure the body, and enable the lady to walk abroad in moſt kinds of weather.

A few years ago a practice prevailed much among young women, of lacing their ſtays ſo tightly, as ſometimes to impede the free motion of the ribs and lungs. I have known inſtances where young girls had nearly expired in a crowded room, by ſtraight lacing, and were only ſaved by the ſtays being ſuddenly divided by a penknife. The modern elegant improvements of female dreſs very much correct this practice; but I doubt much of tight lacing being entirely laid aſide. I believe much

bad health has been induced by it: the ſtomach and other viſcera have been ſo compreſſed as to bring on fainting fits, and the whole proceſs of digeſtion diſturbed.

Perſonal cleanlineſs, being preſerved by change of cloathing, may be mentioned under this head. Where it is neglected, from what has been ſaid, it is to be reckoned among the cauſes of theſe diſeaſes. That the ſkin may be pure and pervious, it ought often to be waſhed; perſpiration cannot make its way through pores obſtructed with filth; it muſt therefore be waſhed off. The habit of perſonal cleanlineſs is beſt eſtabliſhed when begun in infancy, and kept on through childhood and age.

It may be worth while to obſerve, that it is ſometimes of conſequence to accommodate the temperature of the water to the condition of the ſurface. The face and hands will be liable to be chopped if this is not attended to: very cold water ſhould not be uſed when the ſkin is warm; nor warm water when the ſkin is chilled. Many a poliſhed neck, face, and arm, have been ſpoiled by not attending to this rule. The ſame holds good, in going ſuddenly too near a fire, when coming out of a cold wind: or going into a froſty air too ſuddenly

from a hot room. Theſe are not trifling matters: how many fine women have become nervous by having their beauty ſpoiled!

5. Paſſions of the mind. The intercourſe and communication between our material and immaterial parts, is a difficult and intricate ſubject to enter upon. All philoſophers who have ventured to go beyond the threſhold of inquiry in this department, have been bewildered, or returned no wiſer than when they began. Nature ſeems to have endued particular portions of our frame with a more exquiſite connection with our mental part; and ſubject to a cloſer ſympathy with our paſſions. Many external ſigns correſpond with our internal emotions. It is a difficult taſk, if at all poſſible, to wear the ſmile of gladneſs when the heart is ſad. A nervous conſtitution is ill qualified to diſguiſe its feelings. Perſons accuſtomed to ſtudy the variations of feature in the human countenance, ſuch as phyſicians, ſometimes acquire a wonderful expertneſs in developing the paſſions. This phyſiognomonic experience is of great utility to the practice of medicine: it is the gift of genius; and in this reſpect, the phyſician like the poet, may be ſaid to be "*naſcitur non fit.*" The

want of this eminent quality of intellect, makes the laborious plodder a dangerous viſitor at the ſick bed, particularly to the nervous patient: nature refuſes to draw her veil aſide to a clumſy obſerver; who, being denied acceſs to her myſteries, is very apt to pervert the purpoſe of what ſhe diſcovers.

But there is a ſpecies of ſympathy among certain organs of our body, that points out a more intimate connection with the mind, than what is poſſeſſed by others. The lungs and heart, in the thorax: the ſtomach, inteſtines, liver, and all the viſcera ſubſervient to digeſtion, have an innate ſympathy with our emotions. During ſtrong impreſſions on the mind, the heart beats quick and tremulous, and is ſaid to palpitate; the motion of the ribs and diaphragm grows irregular and involuntary; and the action of the lungs ſo unequal as to make reſpiration hurried and convulſed; hence ſobbing, ſighing, and panting take place. The effect of violent paſſions on the chylopoeitic viſcera, is to deſtroy appetite, diſturb digeſtion, invert the periſtaltic motion of the ſtomach and bowels, and render the alvine diſcharge variable and irregular. The biliary ſecretion is alſo inconſtant, and per-

haps altered in quality: the hepatic, cyſtic, and common ducts, may be affected with ſpaſms, inverted and obſtructed; thus jaundice, and vomiting of bile are no unfrequent attendants of violent emotions. The ancients held the liver to be the ſeat of choler and jealouſy, hence the poet ſays,

Cum tu Lydia, Telephi
Cervicem roſeam, et cerea Telephi
Laudas brachia, væ, meum
Fervens difficili bili tumet jecur.

HORACE.

The kidneys, ureters, and bladder, are all ſubject to this ſympathy, from ſimilar cauſes; as appears by violent pains, ſtrangury, and total ſuppreſſion of urine: the colour of the urine is variable; and the quantity is ſometimes profuſe, at other times deficient. Theſe affections of the urinary organs are among the ſureſt diagnoſtics of nervous diſeaſes. On the whole, all the more violent emotions ſtrongly affect all theſe organs, which form a chain of feeling with one another, of a more exquiſite kind, than is to be found in any other part of the ſyſtem, or from any other diſeaſe. The degree of the effect on theſe parts, will be in proportion to the ſenſibility

of the temperament; and in many ſubjects we find hyſteric fits, epilepſy, and other convulſions, tetanus, menorrhagia, amenorrhæa, &c. take place in an inſtant, from mental ſympathy.

One of the moſt common cauſes of nervous, bilious, and ſtomach complaints, is exceſſive, or long protracted grief. Mothers who have loſt children, particularly ſuffer under theſe painful affections, and often date their firſt appearance from the death of a child. I believe the attachment of a mother to the infant, is by far the ſtrongeſt of all human paſſions. Medical attendants are in the daily practice of ſeeing theſe parental feelings exemplified. We read in Tacitus of a Roman mother dying by the rack, rather than diſcover the place where her ſon was concealed, during the conteſt between Otho and Vitellius. In ſome inſtances of maternal affliction, we have obſerved the faculties ſo powerfully oppreſſed by ſorrow; ſo abſorbed in the contemplation of one object, that the mind appeared almoſt, or wholly unconſcious of its own exiſtence, and ſcarcely attended to a ſingle external impreſſion. In ſuch caſes the intervals of reaſon, or conſciouſneſs, were only to be marked

by ſighs, groans, and tears, as the expreſſions of grief. Shakeſpeare has beautifully painted this paſſion, in the lamentation of Conſtance for her ſon, in King John:

> Grief fills the room up of my abſent child,
> Lies in his bed, walks up and down with me,
> Puts on his pretty looks, repeats his words,
> Remembers me of all his gracious parts,
> Stuffs out his vacant garments with his form;
> Then have I reaſon to be fond of grief?
> O Lord! my boy, my Arthur, my fair ſon;
> My life, my joy, my food, my all the world.

Some ſuch expreſſions as theſe might have been uttered by the mother of Siſera, when ſhe heard of his death, if it did not at once deprive her of life. The ſacred hiſtorian deſcribes in ſuch glowing language her expectation of his return, that he probably withheld the reſt of the narrative, from finding terms unequal to expreſs the ſtruggle of maternal feelings, in the tranſition from hope to deſpair.* When David received the account of Abſalom's death, he appears to have been ſo

* The mother of Siſera looked out at a window, and cried through the lattice, why is his chariot ſo long in coming? Why tarry the wheels of his chariots?

overwhelmed by it, as to be inſenſible to a victory that ſecured both his life and his crown. Was ever grief depicted in more plaintive meaſure than in his exclamation on this occaſion? *O my ſon Abſalom, my ſon, my ſon Abſalom: would God I had died for thee, O Abſalom, my ſon, my ſon!* *

We cannot contemplate ſuch violent inſtances of natural affection without ſuſpicion of health being injured thereby; and though not immediately apparent, the effect will ſtrike a quick obſerver in the event of diſeaſe.

Next to theſe heart-rending emotions of parental ſorrow, may be reckoned the effects of diſappointed love, on the ſenſible female frame. In the male ſex the active purſuits of buſineſs or pleaſure, more quickly ſupplant tender impreſſions; and men much ſooner re-

Her wiſe ladies anſwered her; yea, ſhe returned anſwer to herſelf,

Have they not ſped? Have they not divided the prey, to every man a damſel or two? To Siſera a prey of divers colours, a prey of divers colours of needle-work, of divers colours of needle-work on both ſides, meet for the necks of them that take the ſpoils? Judges v. 28—30.

* 2 Samuel viii. 33.

gain that mental tranquillity which fits them for the buſy ſcenes of life. This is not the caſe with the fair ſex; for the influence on both body and mind, ſeems to be in proportion to the concealed ſtruggle of attachment. The heart obtains relief in pouring forth its complaint, and acquires reſolution when this is done: but the hidden paſſion burns the fiercer by being ſuppreſſed.* The ſeparation of the parties, and long engagements that procraſtinate marriage, are often fatal to health. The condition of mind, alternately paſſed between hopes and fears, is worſe than certain diſappointment; hence the ſtate of ſuſpence, to perſons of nice ſenſibility, is always deemed the moſt tormenting.

It is this conflict between attachment and ſecrecy, that has often given birth to the emphatic expreſſion, "*dying of a broken heart.*" But ſuch afflictions of mind commonly, ſooner or later, produce ſome diſeaſe of the nervous

* ——— She never told her love,
But let concealment, like a worm i' the bud,
Prey on her damaſk cheek: ſhe pined in thought;
And with a green and yellow melancholy, †
She ſat, like patience on a monument,
Smiling at grief. SHAKESPEARE.

† Here the poet has finely caught the *pathology* of love-ſickneſs.

ſyſtem, which quickly draws into conſent the digeſtive organs, and others of equally acute ſenſibility. Hence a certain hue of the countenance is ſaid to mark melancholy and deſpair, which is brought on by vitiated digeſtion, and imperfect aſſimilation of the food.

As the manners of the age muſt always materially influence diſeaſes of the nervous claſs, ſo among their moral cauſes, ought to be reckoned religious melancholy, and enthuſiaſm; jealouſy, avarice, inſatiable revenge, boundleſs ambition, envy, misfortunes in buſineſs, and ſome ſpecies of pride. All theſe, in their various operations on the human mind, excite extravagant hope, or abject depreſſions of ſpirit: in the iſſue, haraſs the nervous ſyſtem; produce watchfulneſs, or unrefreſhing ſleep; engender tumultuous paſſions, impair the appetite, and diſturb chylification. To theſe ſucceed ſpaſmodic, bilious, and hypochondriacal complaints; all of which center in the organs that prepare and aſſimilate the nouriſhment of the body.

Some of the ſevereſt inſtances of theſe diſeaſes, which have come under my care, were in officers: men endued with acute ſenſibility

of mind, of fine parts, and with high notions of honour. They had been long tantalized by promiſes of promotion, and lived to ſee unworthy favourites put over their heads. Similar caſes are too often met with among other conditions of life; where worth, virtue, and talents, muſt give place to wealth, ſervility, and intrigue.

The paſſion of *novel reading* is intitled to a place here. In the preſent age it is one of the great cauſes of nervous diſorders. The mind that can amuſe itſelf with the love-ſick traſh of moſt modern compoſitions of this kind, ſeeks enjoyment beneath the level of a rational being. It creates for itſelf an ideal world, on the looſe deſcriptions of romantic love, that leave paſſion without any moral guide in the real occurrences of life. To the female mind in particular, as being endued with finer feeling, this ſpecies of literary poiſon has been often fatal; and ſome of the moſt unfortunate of the ſex have imputed their ruin chiefly to the reading of novels. How cautious then ought parents to be in guarding againſt the introduction of theſe romances among their children; ſo calculated to induce that morbid ſenſibility which is to

be the bane of future happineſs; which to prevent, is the taſk of a correct education; which firſt engender ardent paſſions, and then leave the mind without power to reſiſt or ſubdue them. It is lamentable that three-fourths of theſe productions come from the pens of women; ſome of whom are known to have drank deep of the fountains of pleaſure and adverſity.

The *drama* is another hot-bed of this diſeaſed ſenſibility. It has been long ago remarked, that few Engliſh comedies were ſufficiently pure for the ear and eye of a chaſte and virtuous woman. But if ſuch ſcenes are to be found among them, the ſentiments they expreſs cannot be much improved from the mouths of ſome firſt-rate actreſſes, who live openly as kept miſtreſſes. We are very little obliged by the late importation of a few looſe German plays on the Engliſh ſtage. They are the offspring of a *new ſchool*, and communicate poiſon in a new way; ſuch poiſon as has no antidote on the ſhelves of the apothecary.

The modern general habit of *gaming*, is a frequent cauſe of nervous affection, even to mental derangement. It is an hereditary vice

in ſome families, where children are introduced to the card-table before they are half educated. The country life as yet, has ſcarcely taſted of this depravity.

6. Intenſe ſtudy. Severe mental application depreſſes the nervous power: and whether this ariſes from buſineſs or pleaſure, the ultimate effect ſeems much the ſame. Intenſe thought appears to ſubtract a great ſhare of excitement from many corporeal organs: when long continued, or often indulged, it leaves them in a ſtate of direct debility. Mathematical ſtudies are ſaid to have this effect more than others; and among ſome intimate friends I have known theſe effects. But it is to be obſerved, that perſons attached to the mathematical ſciences, are commonly men of cool judgment, of deliberate modes of thinking, not eaſily diverted from their purſuits, and rather of a torpid nervous ſyſtem. Their complaints therefore aſſume much of a hypochondriacal caſt. Among people of a more mobile habit, ſevere ſtudy excites in the firſt paſſages, a diſpoſition to ſpaſm, and convulſive motions, amounting frequently to what is called the hyſteric affection, or *globus hyſtericus*. The abdominal viſcera particularly feel on

theſe occaſions: the ſtrong exertions of the animal functions abſtract or expend much of that energy or ſenſorial power, which ought to be alike diffuſed over the natural and vital actions. The appetite flags; the bowels become ſlow; flatulence and acidity ſupervene from imperfect digeſtion; the bile is ſecreted in ſmall quantity, and its flow into the duodenum often obſtructed; dyſpnœa is a common attendant; ſyncope not unfrequently happens, and dejection of ſpirits to ſuch a degree, as to reduce the philoſopher to an idiot. Emaciation of body quickly follows this courſe of life; partly owing to vitiated ſanguification, but perhaps alſo, from obſtructions in the lacteals and meſenteric glands. The pallid colour of a hard thinker or ſevere ſtudent, may therefore be imputed to dyſpepſia, or to de-oxygenized blood, from confinement within doors. Young men who are ardent in purſuit of knowledge, and greedy of literary fame, often lay the foundation for ſtomach complaints at the univerſity, that are never afterwards to be overcome.

Perſons much attached to muſic, as being furniſhed with acute nerves, and nice ſenſibi-

lity, and of a ſedentary turn, are often haraſſed by theſe diſeaſes. This remark indeed, applies to all who may be conſidered as votaries of the fine arts. Such people, whether male or female, have commonly a prediſpoſition to nervous diſorders.

I have met with many obſtinate caſes among ſchoolmaſters; in part to be attributed to confinement within doors, but chiefly to ſtudious habits. But what is ſtill more ſtrange, I have even known them among ſhepherds, a claſs of men enjoying the pureſt air, but becoming nervous and hypochondriacal from an inactive ſolitary live, and a thoughtful mode of ſpending time, and reading abſtruſe ſubjects.

7. Lactation or nurſing. This office of the mother to the child, if the dictates of Nature deſerve attention, ought to be conſidered as a very ſalutary duty; for if we look to the natural ſtate of mankind, we find every mother able to perform it. The child-bearing part of life is uſually healthy; and weakly females have their health improved by becoming mothers. It muſt therefore be owing to ſome deviation from the eſtabliſhed rules of the animal economy, that ſo many women are to be found unequal to this taſk. It is the duty

of the huſband to encourage the wife in the exerciſe of this amiable attention to the infant; and if he prevents it, he rends aſunder one of the ſtrongeſt ties of human affection. Yet we often ſee mothers ſo attached to the office of nurſe, as to view the weaning of their child with horror: ſuch feelings dignify human nature; what a pity there ſhould be found exceptions to their being general.

It would appear to be the indication of nature, to ſuckle the infant till it is nine months old, as correſponding with the time of geſtation. At this age the child is capable of taking other nouriſhment for its ſupport. But when the mother grows too delicate and weak for the office, it muſt be weaned ſooner. The complaints which are brought on by long ſuckling, are much the ſame with thoſe that follow frequent abortions, and immoderate or irregular menſtruation. They are all of the nervous claſs. As the regular peculiarity of the ſex is the beſt teſt of female health, ſo the vicarious lactation may be conſidered as a relief to the other organs, and thus beneficial. But when continued too long, the general frame is debilitated, and particularly the uterine ſyſtem. The ſtrength of the woman is not

reduced by affording nouriſhment to the infant merely; it is the ſympathy which ſubſiſts between the different organs, that gives birth to morbid feelings, and the ſtomach and inteſtinal canal with many others are quickly drawn into conſent.

Mothers who truſt their children to hired wet nurſes, would do well to inform themſelves how far theſe women have weaned their own children with ſatisfaction. Few mothers, among the decent orders of women, can be ſuppoſed to leave their offspring without regret; and it may happen that the health of the other infant is liable to ſuffer in the conflict. Much pretended refinement often takes place about ſelecting a nurſe free of diſeaſe: but what ſcrutiny can ſecure the ſuckling againſt the bad effects of her paſſions? Theſe muſt frequently ſow the ſeeds of future indiſpoſition, that may not be diſcovered till too late. A mild and ſerene condition of mind muſt be a valuable ingredient in the character of a nurſe; for which reaſon the nervous conſtitution ſhould be avoided. On the whole, a hired nurſe is only a leſſer evil, that can by no means repay the offspring for the want of the mother's breaſt.

But nurſing mothers among the lower orders of women, if they remain with their families, are often badly nouriſhed: and if they feed much on tea, are ſubject to that ſpecies of conſumption that is denominated nervous. This is in fact a high degree of nervous exhauſtion and debility, attended with many of the moſt prinful ſymptoms. * To keep the child at the breaſt for 18 months or two years, cannot be done without injury to the mother's health. Yet this practice is frequent, and muſt be conſidered as a ſad alternative to prevent the quick increaſe of a family.

8. Miſcarriages and premature labours, &c. Few mothers who have ſuffered miſhaps during pregnancy, eſcape with impunity. All miſcarriages are attended with ſome degree of danger, and much bad health is with juſtice imputed to them. The wife who has proſpects of being a mother, muſt undergo much mental diſtreſs at being diſappointed, independent of all perſonal hazard. This ſpecies of anxiety is one great cauſe of one miſcarriage being ſo apt to ſucceed another, as the mind

* All wet nurſes ought to abſtain from *tea*. Next to *ſpirits* and *malt liquors*, it is moſt hurtful to the ſuckling.

is tremblingly alive to every ſymptom that reſembles the former. This ſtate uaturally begets a nervous ſenſibility, which too often creates imaginary fears when there are none real. Long and ſevere labours, to which may be added ſome of the diſeaſes of the puerperal ſeaſon, are alſo to be conſidered as a frequent ſource of nervous diſorders. Large evacuations of blood at that period are known to induce the moſt violent hyſteric paroxſyms and other convulſions; hence theſe affections ſo commonly follow floodings during labour and after it.

The changes which take place in the breaſt and womb after the birth, very materially affect the general ſyſtem of nerves. Theſe evolutions are marked by increaſed irritability, and fevers of the moſt acute kind are liable to ſupervene; and point out the neceſſity of a ſoothing regimen, tranquillity of mind, pure air, mild diet, open bowels, &c. If there is an hereditary prediſpoſition, nervous ailments will of courſe more readily appear, and be aggravated by all improper treatment.

9. Climate. In the deſcription of the inhabitants of a large town, I have mentioned perſons returned from the Eaſt and Weſt In-

dies. Such perſons are remarkably ſubject to the diſeaſes of which we now treat. The acute fevers of tropical climates in a particular manner affect the ſtomach, bowels, and biliary ſecretion. The yellow fever of the Weſt Indies derives its name, and part of its character, from the exceſſive flow of bile; which not only tinges the ſerum of the blood, the urine, and ſkin, but in a manner inundates the inteſtines. No pain or tenſion in the region of the liver, accompanies this unuſual ſecretion; and the bile is taken up by the abſorbents, enters the circulation, and produces yellowneſs of the ſurface, without any obſtruction of the ducts as in jaundice, for the fæces are highly bilious. There ſeems to be little reſemblance between this endemic of the Weſt, and the hepatitis of the Eaſt Indies. I would therefore call it, as has been done by one of the beſt writers on the ſubject, *Cauſos.** In the hepatitis, an exceſſive biliary ſecretion is not mentioned. The Weſt India fever is always rapid in its progreſs; but the liver diſeaſe of the Eaſt is often ſo chronic in its form, as to ſteal on im-

* Dr Moſeley on Diſeaſes of the Weſt Indies.

perceptibly for months, without pain ſufficient to create uneaſineſs or alarm, though it may at laſt arrive at ſuppuration. They both affect chiefly young robuſt Europeans, newcomers, who live full, and drink freely of vinous liquors. The ſame modes of living, we know, create hepatic diſeaſes in England; and the analogy extends to other pampered animals, as the domeſtic fowl, turkey, and pig. Both diſeaſes leave the digeſtive powers in a weakened condition; and there are few who do not complain of a degree of dyſpepſia after theſe attacks. But in a multitude of caſes in which I have been conſulted, by perſons returned from India, it was doubtful to me, whether mercury exhibited as a remedy, or the diſeaſe itſelf, were to be moſt blamed for the production of dyſpeptic affection. As far as I have been able to learn, from both written and verbal accounts, this complaint, ſo frequent on the Coromandel coaſt, ought to be treated with large bleedings, and copious active purgatives, in the very firſt attack. The quantity of blood to be taken, I think, ought not to be regulated by rules laid down by ſyſtematic writers for the inflammatory fevers of this country; if it is done at the proper

period, it ought to be infinitely larger. If theſe evacuations have been neglected, or ſparingly employed, ſuppuration, torpor, or infarction of the liver, to a certainty ſucceed, which render the uſe of mercury indiſpenſible. Where the diſeaſe aſſumes at firſt the chronic form, mercury is conſidered the only remedy. The phraſe, "*chronic inflammation*" is a new term in medicine, and I think an improper one here. The leſs active hepatitis is ſtill a febrile diſeaſe, only leſs marked; for how can we ſuppoſe purulent matter to be generated without thoſe diſtinguiſhing phenomena that are characteriſtic of it? The mercury in this caſe, I ſhould ſuppoſe to act partly on the biliary pores and ducts, partly on the circulation of the liver, but chiefly on the abſorbents of that viſcus. Theſe effects from mercury being ſo well known, why contend for it as a *ſpecific*, in this oriental diſeaſe? It would therefore appear, that there is a period in hepatitis, when it is indicated and ſafe; and as its ſtimulant powers are ſo evident, that muſt be, when the ſymptoms of active inflammation have ſubſided. We thus ſee how frictions in ſome nervous conſtitutions, muſt be the moſt eligible way to direct this

medicine, as ſome authors contend. Yet mercury, nevertheleſs, at all times has a manifeſt action immediately on the nervous ſyſtem; and if limits can be drawn to its exhibition in the different ſtages of hepatitis, care ſhould be taken that the habit is not deſtroyed by it, and diſeaſes worſe than the original one produced. But if this treatment deſerves all the encomiums which have been given it, how comes it, that ſo many return to this country labouring under the *liver complaint*, as they call it, after having repeatedly undergone the mercurial courſe?

The conſequences of tropical fevers, will however be in a great meaſure prevented as the *affuſion of cold water* gets into univerſal practice; and employed with the precautions directed by two great phyſicians of the preſent times, my late lamented friend, Dr Currie, and my learned friend and neighbour, Dr Jackſon, of the army. In the acute hepatitis it promiſes to be an effectual remedy. Much reaſoning has been employed on the cauſe and treatment of fever; but no certain method of cure was ever given to mankind before the cold affuſion. We can now readily admit that the ſudden abſtraction of a great quantity of heat, by the ſhock, as it is called, diſſevers

in an inſtant thoſe aſſociated actions which conſtitute the febrile phenomena: or what is emphatically ſaid, to cut the fever off at once.

The hepatitis of the Eaſt Indies, as affecting an organ ſo neceſſary to the animal economy, may have thus a large ſhare in the production of dyſpeptic complaints.

The effects of a warm climate on the hepatic ſyſtem, and producing a redundancy of bile, admit of much ſpeculation. A warm ſummer in this country has a ſimilar effect: in ſuch a ſeaſon, cholera and dyſentery are common. Exceſſive heat may be regarded as it acts on the nervous and ſanguiferous ſyſtems. It powerfully increaſes the ſenſibility of every part; and renders the mind more ſuſceptible of pleaſurable ſenſations. The muſcular fibre becomes more irritable; and what are called ſpaſmodic complaints, are more common in warm than in cold regions. Fevers alſo are more frequent than in Europe, in which the ſtomach is much diſeaſed, and bilious vomiting and a yellow tinge of the *tunica adnata* are attendant ſymptoms. Inſolation is the effect of the rays of the ſun in a perpendicular direction, acting on the *ſenſorium commune*. The laſt degree of debility, with bilious vo-

miting, indicates this affection; juſt as we obſerve ſevere hurts or wounds of the head induce the ſame ſymptoms. Now we explain theſe ſymptoms from the nice conſent of parts; they prove the ſtrong ſympathy with which the chylopoeitic organs, by their office, are linked with the functions of the brain. The exceſſive heat is an exhauſting power directly acting on the *ſenſorium commune*; for compreſſion of the brain from blood or other cauſes, does not excite the ſame train of ſymptoms. We therefore draw the concluſion, that warm climates induce hepatic and ſtomach diſeaſes, by primarily affecting the nervous ſyſtem. As far as heat affects the circulation of the blood, it ſeems to have little effect in bringing on nervous irritability, and is of inferior conſideration in this inquiry.

But while we blame the heat of the climate for the production of nervous and bilious diſeaſes among Europeans, we muſt alſo take into account their modes of living, ſo injurious to health. The *moſt debilitating of all pleaſures* is by them indulged to exceſs; and the paſſion ſeems to grow from what it feeds on. Highly ſeaſoned food, the large uſe of vinous liquors, and licentious manners, carry luxury to

its utmoſt pitch. The warmth of the climate is therefore not to be ſingly blamed in engendering bilious and dyſpeptic complaints.

If perſons who live in this way, remain in a tropical country till they paſs the meridian of life, and then return to Britain, they ſeldom enjoy good health. The cauſe of this is obvious. They ought therefore, if convenient, to paſs their firſt winters in ſome of the ſouthern provinces of France, or in Spain or Portugal; and thus accommodate the conſtitution gradually to the great change of temperature.

Some diſtricts of country that are low, ſwampy, and ſubject to fogs, commonly diſagree with nervous and bilious people. And thoſe ſeaſons when the weather is variable, and liable to ſudden tranſitions, are alſo hurtful. Many of their ſymptoms, particularly depreſſion of ſpirits, increaſe under a cloudy atmoſphere: hence the glooms of November are proverbial for having this effect.

10. Medicines. All nervous perſons are uncommonly fond of drugs; and they are the chief conſumers of advertiſed remedies, which they conceal from their medical friends. Among ſome well meaning people, this inordinate deſire for medicine has frequently become of it-

ſelf a diſeaſe. With many of them, phyſic to be uſeful, muſt be clothed in myſtery; and the moment a diſcovery is made of the compoſition, the confidence is loſt. Medical attendants have too often brought this puniſhment on themſelves. Were they unanimous in combating the prejudices of mankind, by candour and openneſs of conduct, by a fair avowal of the imperfections of their art, and the honeſt confeſſion that articles of *Materia Medica* form but a ſmall portion of its reſources, they would not ſo frequently ſee their commands diſregarded, or learn that their compounds have been thrown out of a window. This is the only way in which I can account for ſo many perſons of good ſenſe and diſcernment, conſigning themſelves and families into the hands of impudent and illiterate quacks.*

It was the ſaying of a very ſagacious profeſſor of medicine, to his pupils, "*young gentlemen, if your medicines ſhould do no good, take care that*

* The duty on quack medicines at this time is eſtimated at upwards of 300,000l. annually. From this it may be ſuppoſed that ignorant pretenders to medicine take not leſs than *two millions* out of the pockets of the community!

they do no harm." * When active medicines are long continued, and do not cure, it is very likely they may do miſchief. But the remedy that cures one diſeaſe, if injudiciouſly adminiſtered, not unfrequently prediſpoſes the body, and paves the way to another malady. I ſhall begin with

EMETICS. The exhibition of *emetics* is often taken out of the hands of the medical profeſſion; and every good woman thinks herſelf competent to direct a vomit. Some people with delicate ſtomachs are in the habit of taking theſe articles, for every uneaſy ſtate of that organ, which is conſtrued into a foul ſtomach. But nothing can more certainly tend to weaken, nay paralyze that viſcus. The operation itſelf is painful and unnatural; for the act of vomiting is to invert, and evacuate the contents of the ſtomach the wrong way. This cannot be done without medicines that are firſt highly ſtimulating: they paſs through the ſtimulant ſtage of the proceſs firſt; and when that is over, the fibres of the ſtomach being exhauſted for a time, ſickneſs is the

* The firſt Dr Rutherford, Profeſſor of Medicine in the Univerſity of Edinburgh.

conſequence, and vomiting ſucceeds it. This nauſea is ſometimes ſo ſevere, as to occaſion fainting, and even convulſions; and the frequency of the pulſe during the operation is often ſo reduced as to give ſerious cauſe of alarm; and is at all times ſlower till the ſickneſs is overcome. Such are the ſymptoms to be marked during the emetic effects of tartarized antimony, vitriolated zinc, vitriolated mercury, ipecacuanha, ſquill, &c. If therefore, this operation is too frequently reſorted to, what is to be expected but a weakened, mobile or torpid condition of the ſtomach, and every organ that fills a link in the great chain of ſympathy with it. The hurtful effect is alſo much increaſed by the copious draughts of warm water, taken to encourage the vomiting.

At the time that James's Powders were in general uſe, and when families were in the practice of taking that medicine as a preventive of fever, at ſtated periods, weakneſs of ſtomach and indigeſtion were often traced to this cauſe. Ignorant people are apt to conſider many complaints, where the pulſe is quick, as fevers, and fly to improper remedies.

But antimonial emetics require the utmoſt

caution in the exhibition to nervous people, and all who poſſeſs irritable bowels; ſuch as dyſpeptic and gouty; ſevere cramps, hyſterics and diarrhæa, too commonly follow. They likewiſe encourage eructation, and by inverting the gullets of ſome people, a kind of ruminating of the food takes place, a habit very disagreeable and diſguſting. When we reflect what a ſmall portion of antimonial preparation is required to excite vomiting, we muſt be convinced of its uncommon activity, and that it acts immediately on the nerves of the ſtomach. The ſame guarded practice applies to all the metallic oxides, when uſed as emetics. What may at ſeaſonable times be a valuable remedy, may thus, by being improperly directed, have the moſt baneful effects. Nervous patients are particularly ſubject to a kind of riſing in the cardia, or upper orifice, a ſort of inverted motion in ſome of the muſcular fibres, with diſtention, flatulence, and acidity, that create vaſt ſickneſs. But to have recourſe to vomits for relief, would only aggravate the complaint. Theſe perſons are alſo more eaſily affected by diſagreeable objects, and bad ſmells, than others, which haraſs them not a little. As they grow ac-

quainted with this frailty of their ſtomachs, they will rather ſtudy to avoid the cauſes, than truſt to any article of medicine for relief. When conſtant vomiting has been brought on, in nervous ſtomachs, by whatever means, no complaint is more difficult to be reſtrained: ſome afflicting caſes of this kind have come within my knowledge, in young perſons, part of which terminated fatally.

Purgatives. This claſs of medicines, like the preceding, are too often directed by improper judges of their fitneſs. But the greateſt harm is done in infancy and childhood, when parents run to the aid of phyſic for every trifling complaint, but chiefly for cutaneous affections. It is immediately decided that theſe ſpots are owing to bad humours and foulneſs of the blood, and muſt be carried off by a purge. Such reaſoning as this formerly prevailed among medical people; we cannot therefore be ſurprized that perſons not in the profeſſion ſhould ſtill retain a little of the old leaven. Purgative medicines differ extremely from one another; and if it is a nice point in medical practice to ſuit the purge to the nature of the complaint and peculiarity of conſtitution, it muſt be often

dangerous to truſt them in common hands. I was once called to viſit a farmer who had taken two ounces of ſaltpetre, inſtead of Glauber's ſalt. I found him in extreme pain about the ſtomach, with ghaſtly looks, an intermitting pulſe, and cold ſweats. A few minutes longer would have been too late to ſave him: by drinking plentifully of warm milk and water, and a briſk emetic, he was recovered. But I have known ſimilar caſes prove fatal.

Confinement within doors, an uniform mode of living, and ſedentary habits, are ſo commonly met with, among perſons of the nervous temperament, that a conſtipated ſtate of body is a general condition of their diſeaſe. Hence the frequent recourſe to medicine for opening the bowels. Some of the moſt draſtic purgatives, ſuch as aloes and ſcammony, come at laſt to be in common uſe with them. This cuſtom ſoon begets a habit; when the bowels are brought to that torpor and inactivity as never to be moved without the aid of a drug. The ſenſibility of the inteſtines is thus, by degrees, worn out; the lacteals which take up the food, the mucous glands and exhalants, that pour forth fluids, as well as the nerves and muſcular fibres, grow torpid:

the conſequence is the loſs of the periſtaltic power, and the bowels are apt to run into inverted motion, and ſpaſmodic conſtriction, till a fatal cholic, an intuſception, iliac paſſion, or cramp, cloſe the ſcene. Painful diſeaſes of the rectum, ſchirrus, hemorrhoidal tumours, and fiſtulæ, too often render life miſerable, from this ill-conducted practice. We have known families of children that underwent a courſe of purging twice a week!

But if *mercury*, in the form of *calomel*, or any other preparation of that metal, make part of theſe habitual purges, the conſequences are always to be dreaded. Calomel is a favorite article with ſome phyſicians as a purgative, and from the minuteneſs of its doſe, very deſirable to the patient. It alſo operates quickly and briſkly; which, with nervous and dyſpeptic ſubjects, is matter of great ſatisfaction; for their odd feelings and ſingular ſenſations within, give the ſuſpicion that they are full of obſtructions and cannot be ſufficiently evacuated. Yet ſuch inſtances of ſlow bowels are not to be conſidered as depending altogether on a local affection. They are joined with a general ſtate of the body, and only to be radically cured by correcting the original

evil. Thus a long walk out of doors, and a little active exercise and recreation, will effect sometimes, what large doses of medicine are unable to perform.

But *mercury* is the most dangerous of all frequent purges; it sooner exhausts the irritability and vital power of the intestines, than any other metallic oxide, except arsenic. It never fails in the end to add to the disease: it is peculiarly contra-indicated in the nervous temperament, from the mobile disposition of nerve; and its action on the bowels, very much resembles a state of dysentery, by producing the most violent contractions, gripes, and tenesmus. It thus frequently brings on *prolapsus ani*, a complaint to which persons of weak bowels are liable, and especially women, who have experienced hard labours, and borne a number of children.

Many volumes have been written on diseases, supposed to have originated from the use of *mercury* when given for the cure of *lues venerea:* yet strange to relate, its most common consequences, dyspeptic and nervous affections, are scarcely mentioned. * I firmly

* A little tract, "ON THE USE AND ABUSE OF

believe all the derangements which it occaſions in the body, are ſmall when compared with the injury done to the nervous ſyſtem and digeſtive powers. Some phyſicians and ſurgeons fly, even in common caſes, to one of its moſt dangerous preparations, *hydrar. mur.* and ſeem to overlook its ultimate effects on the conſtitution. It has often been my lot to witneſs theſe effects in the practice of others: for of *fifty thouſand caſes* of the venereal diſeaſe, which I have attended, I am convinced, that not one of the number ever required this acrid mercurial. Hæmoptyſis ending in phthiſis, was a frequent ſequel to this treatment.

It is well known that miners and workers of this metal in the various arts, are, after a certain time, ſubject to the moſt violent nervous afflictions, ſuch as colics, epilepſies, cramps, tremors, &c. and the laſt ſtage of theſe is palſy, in its moſt hideous form. In

MERCURY," has juſt been publiſhed by Dr Wilſon; in which he particularly notices its hurtful effects on the ſtomach and inteſtines. I am glad to obſerve, that his remarks are very much like my own. This eſſay appears to be only a prelude to more extenſive diſquiſitions on the ſubject; which I hope the learned author will follow up with his accuſtomed ability.

the ſilver mines of Spain, in South America, where mercury is employed to ſeparate the gold, the poor ſlaves ſeldom live three years, from being expoſed ſo much to its fumes. Hence to be ſent to the mines implies the laſt degree of human puniſhment. As the lues venerea extends in ſociety, and the exhibition of mercury for its cure becomes every day more familiar with medical people, there is danger that they forget they have in their hands one of the moſt active mineral poiſons, and extend its uſe to all thoſe diſeaſes that reſiſt other remedies. In the hands of the ignorant and indolent of the profeſſion it has done incalculable miſchief. The ignorant man is neither capable of ſelecting its proper preparations for particular conditions of body, nor of knowing when it is forbidden; and he is unable to diſcern when it has done harm. The indolent among us, who give themſelves no care about the inveſtigation of a diſtemper, cannot be fit perſons to preſcribe an article, that injudiciouſly given, may deſtroy life. This remark does not merely apply to the vender of advertiſed remedies; it comprehends many in private life, who, from deficient education,

are not entitled to more confidence than the itinerant tribe.

But there is a form of the diſeaſes of which we now treat, in which mercury is ſaid to act with undeniable efficacy; namely, in what are called *bilious complaints*.

The term belongs to common language; as ſuch I have adopted it in my title; but it is not correct in a medical nomenclature. Some members of the profeſſion, to improve our vernacular idiom, have thought proper to give theſe ailments the name of *liver complaints*, as that organ is ſaid to be their ſeat; but this term is equally undefined in a ſcientific view, as that of *ſtomach complaints*, ſo long applied to diſeaſes of the digeſtive powers. The phraſe *bilious* derives its origin from that tinge of the ſkin ſo often obſerved in dyſpeptic perſons, who alſo occaſionally paſs bile both upwards and downwards. Now *bile* appearing in theſe forms, being a natural ſecretion made by the liver, is to be conſidered as the *effect*, rather than the direct *cauſe* of indiſpoſition. In the preſent day, a dyſpeptic perſon no ſooner complains of pain in the right hypchondrium, than the liver is ſaid to be diſeaſed; and a bilious ſuffuſion of the ſurface, is conſidered an infalli-

ble ſymptom of the ſame viſcus being affected; and the mercurial proceſs is immediately commenced. It is diſguſting to hear this phraſeology ſo common in the mouths of medical people. It is well known that jaundice itſelf is common enough, even during the mercurial treatment of lues venerea.

We ſhall learn from a deſcription of the nervous temperament, that perſons ſubject to indigeſtion, to frequent diſcharges of bile, and ſpaſmodic affections of the chylopoeitic organs, are endued with uncommon delicacy and irritability of the firſt paſſages; and that this ſtate is generally attended with great debility. Such a condition of the muſcular fibres, in the oſophagus, ſtomach and bowels, with all the canals which pour fluids into them, naturally makes the whole ſubject to reverſed motions, irregular contractions, increaſed ſenſibility in one part, and deficient power, or torpor, in another. The ſtate of the liver itſelf will partake of all theſe irregularities. Its ſecretion will ſometimes be ſuſpended, ſometimes deficient. It will ſuffer ſtagnation in the biliary pores, and in all its ducts. Even when it flows freely into the duodenum, it will at one place be collected in greater quantity than at

another; ſometimes retained, and at others flowing profuſely; and the flow or quicker motion of the bowels, will exhibit a proof of this inconſtant paſſage of the bile in the alvine diſcharge; in its colour, its conſiſtence, and fœtor; while tranſient jaundice will alſo appear.

The ducts may alſo be obſtructed by biliary calculi, over which mercury has no power. Indeed dyſpeptic perſons are very ſubject to theſe concretions, which are probably owing to ſome diſpoſition in the bile itſelf.

Theſe commotions will frequently bring on epileptic and hyſteric convulſions, violent cramps, and death. The mind ſtrongly ſympathiſes; it is irritable, irreſolute, timid, deſponding, and ſuffers more or leſs ſuch derangement in its relation of things, and in its perceptions, as amounts to a degree of delirium. This conſtitutes what, in common language, ſome perſons call a *bilious or nervous attack.*

This being our explanation of the biliary affection of the nervous temperament, it muſt be ſtraining facts to the utmoſt, to find any analogy between it and the hepatitis of the eaſtern hemiſphere. How indeed can any qualified obſerver of the phenomena of diſeaſe,

compare the full robuſt habit of a young European, on the coaſt of Coromandel, with the weakly and delicate nervous lady of our climate? Yet the analogy, monſtrous as it is, in the practice of ſome phyſicians, has been ſaid to be correct; and dyſpeptic and hyſterical females, have, on the faith of this doctrine, been tortured with mercurial courſes, till their very teeth have been in hazard of dropping from their ſockets, and their lives brought into danger; and this plan of treatment ſometimes repeated, as the ſymptoms were found to recur.

I hold it as an unqueſtionable fact, that a peculiar prediſpoſition attends both diſeaſes; and that local cauſes excite both. It appears from many particular ſymptoms, that a directly oppoſite ſtate of the body prevails in the two complaints. How then can the ſame medicine be indicated in both? The icterus is not characteriſtic of hepatitis; nor is the capricious diſpoſition of the bowels, and the mental diſquietudes of nervous affection, ever included in the account of its ſymptoms. The analogy therefore between hepatitis and the dyſpepſia of the nervous temperament, has no foundation in pathology, and leads to no ra-

tional method of cure. That the liver may be enlarged in theſe diſeaſes, as well as from hepatitis, I readily admit: but ſuch enlargement muſt be brought on in a very different manner. It muſt be chiefly owing to the debility of the hepatic nerves; by which means a torpor or kind of paralyſis takes place; effuſion of ſome kind may then happen in the parenchyma of the liver, which the lymphatics are not able to carry off. What are called tubercles of the liver, are moſt likely enlarged lymphatic glands and veſſels; this may be another cauſe of increaſed ſize. But it is probable alſo, that the ſecreted bile itſelf is frequently the cauſe of the great bulk, from torpor of the *pori biliarii* and ducts. I believe however in dyſpeptic habits, that ſuch increaſed ſize of the liver is a rare diſeaſe; and when it does happen, it ought to be conſidered as an effect, not a primary cauſe of indiſpoſition. If, therefore, there is much nervous prediſpoſition, mercury muſt do a great deal of harm, and add to the miſchief.

Some perſons have an opinion, that mercury acts immediately on bilious affection, independent of evacuation; but this is fanciful. A purge, in which calomel is combined with

a cathartic, as it excites the duodenum in its paſſage, it alſo urges into action the different ducts which open into it; and the laſt evacuations of a mercurial purge are commonly bilious. This increaſed action may, by ſympathy, go farther; the *pori biliarii* may feel it, and perhaps the whole viſcus. Thus the liver may be purged, and excited to healthful action. But what one doſe or two may effect, a third and fourth may deſtroy; and by knowing the conſtitution of the patient, we ſhall know when to ſtop. And as cramps and ſpaſms, of the moſt painful kind, are part of theſe diſeaſes, ſo mercurial purges, as I have often ſeen, cauſe great hazard of bringing them on. But there are many purgative articles, that in theſe caſes, have all the good effects of mercury, without the deleterious ones; and they ought to be preferred. Very active exerciſe will alſo, in many inſtances, ſuperſede the uſe of medicine; ſo great is the power of agitating the abdominal viſcera, in promoting the due flow of bile.

The hepatitis of the Eaſt Indies has been long conſidered a ſerious diſeaſe, and often fatal; and as it has ſeldom yielded to a mild treatment, the exhibition of mercury is juſti-

fied. But it cannot be denied, although this medicine is chiefly to be depended on, that even in India it has done infinite harm to the conſtitution. I therefore embrace the opportunity of quoting the following paſſage from a modern Journal. It is given without the writer's name, but the cautions which it inculcates are of ſuch great value in practice, that even anonymous authority renders it reſpectable.

Extract of a letter from a ſurgeon on the Madras eſtabliſhment, dated the 22d October, 1805.—" My laſt letter from —— gave me " ſad accounts of his health. He is ſuffering " much from exceſſive uſe of mercury; and " has had, he ſays, *ſpaſms of the diaphragm*, " *and excruciating pains in his ſkin, bones, and* " *head.* It may be news to you, that mer- " cury in this country, when given in too " large quantity, cauſes ſufferings more dread- " ful than the diſeaſe for which it is a *ſpecific*, " and experienced ſurgeons are cautious never " to exceed in its employment. You aſk " me if the erythema mercuriale is frequent " with us? Very lately a brother ſurgeon " here had a caſe of it in his hoſpital which " terminated fatally; and with the natives " who never can be made to cloath them-

" ſelves ſufficiently, or almoſt at all, when " under the uſe and influence of mercury, " this diſeaſe occurs frequently, and often " proves deſtructive."

If ſuch are the effects of mercury in robuſt conſtitutions, and in a climate peculiarly favourable to its adminiſtration, what ſeverities are we not to expect in weak nervous bowels, and in a condition of atmoſphere, that in deſpite of every precaution, ſo often throws its activity on the firſt paſſages? It is to be hoped the advice given in this extract will not be loſt on phyſicians and ſurgeons in England, who are ſo apt to reſolve every pathological difficulty, into a liver complaint; and pour in mercury *ad infinitum.*

Mercury as a cathartic acts beſt in conjunction with jalap: a pill containing three grains of the latter to one-ſixth of a grain of the former, purges moderately in a hale ſtate of body. I may be told in contradiction to this, that a *dram* of calomel has been given to a child; and *half an ounce* to an adult, in a few days, without any bad effect. But, becauſe theſe patients were not deſtroyed, is the heedleſs adminiſtration of ſo active a medicine to be juſtified by ſuch proofs? I have ſeen perſons

ſurvive large doſes of *corroſive ſublimate mercury and arſenic;* yet no judicious phyſician will compare theſe recoveries with the limited doſes of either article, adapted to the nature of temperament, and diſeaſed ſtate of his patient.

Mercury being a medicine given in a great variety of preparations, has long been the chief ingredient in quack remedies. It is thus vended under the form of tincture, drop, powder, pill, &c. An article of *materia medica* poſſeſſing ſuch activity in ſome conditions of the living ſyſtem, may be capable of producing great and ſalutary changes. But in effecting theſe, certain premiſes and indications are to be attended to, to juſtify the exhibition: and the phyſician who does not give himſelf the trouble to conſider theſe circumſtances, may perform the part of an executioner. Mercury being particularly hurtful where the ſtomach and bowels are very irritable, is forbidden in gout and in the nervous. In thoſe perſons, frictions of the ointment leſſen the danger. Hence it is improper in women and children; in thoſe ſubject to epilepſy, or other convulſions; and in every one, who may be liable to ſpaſmodic complaints of any form. In ſtates of torpor and ſtrength, it can be

given with more ſafety: it is ſuppoſed to be the beſt remedy in glandular obſtruction, if the attendant debility does not contra-indicate its uſe. But it is too often to be obſerved, that thoſe who make moſt free with the exhibition of mercury, are the leaſt qualified to guard againſt its bad effects in improper caſes.

I reſided a few years ago in a naval ſea-port, where I was often conſulted for ſtomach and nervous complaints, by ladies, the wives and relatives of officers, and my other friends in the public ſervice. Many of theſe females had been reſidents in warm climates. The great reſemblance which the caſes had to one another, excited no ſmall degree of ſurprize at firſt, till I learned they had been all ſubjected to a ſimilar mode of treatment. In ſhort, they had been patients of a phyſician of extenſive practice in the neighbourhood, who preſcribed mercury for every diſeaſe. Moſt of theſe women, among whom were ſome of great mental and perſonal accompliſhments, had been kept for months or weeks under the influence of the medicine; with their throats, mouths, and tongues ſo ſwoln and excoriated, and the teeth ſo looſe, as to confine them to a diet of ſlops. Thoſe who had no ſtomach

complaints when they began this treatment, found them come on after it; and ſuch as had been nervous and dyſpeptic before, felt all their ailments aggravated. This phyſician not ſatisfied with the milder preparations, made a common remedy of hydrar. mur.

A practice not unlike to what I have juſt related, made ſome noiſe in our navy during the late war. A phyſician on a foreign ſtation, took it into his head that all modern diſeaſes originated from Syphilis. It was in vain that officers and ſeamen pleaded innocence: if they were unconſcious of receiving infection themſelves, they were told it muſt come from their parents, ſometimes to many generations back. Few men could anſwer for their purity on theſe occaſions: a mercurial courſe was therefore directed; not for days or weeks, but for years; for there was no ſafety but in continuing it at intervals through life. A medicine of the kind, employed on ſuch terms, could not fail to do harm: ſome of the moſt unfortunate ſtomach affections which ever came under my care, owed their cauſe to this treatment; a few valuable men were brought to the grave by it, in the circle of my own ac-

quaintance, where I ſuſpected a ſchirrous pylorus.

Mercury exhibited in quantity, either by the mouth or by friction, very quickly excites an artificial fever, uſhered in by chills, ſhivering, and a hot ſtage. The pulſe becomes frequent, at firſt full, but latterly weaker and quicker: want of appetite, nauſea, and often vomiting, commence; reſtleſſneſs and night ſweats ſupervene; the body bears the cold air ill; head-ach; fetid breath; the bowels are commonly oppreſſed with flatulence, ſevere twitches, purging, teneſmus, and even bloody ſtools; to theſe ſymptoms, debility and emaciation ſucceed; the tongue, mouth, and throat, inflame, ſwell, grow painful, and ulcerate, and the ſaliva is poured forth in a continual ſtream. During theſe effects of mercury on the body, the mind becomes irritable and unequal, but generally low-ſpirited; and after ſome time exhibits all thoſe feelings, uſually called nervous, inducing the hyſteric affection, convulſions, and frequently the epileptic paroxyſm itſelf. It is therefore plain, that in the nervous temperament, all the phenomena now deſcribed, muſt appear with greater violence, as is obſerved in children and women, and in all who have weak bowels.

The conſtitutions of children, in point of debility and irritability, approach to the female habit of body: the nervous power is liable to irregular motions; eaſily affected by ſtimuli, and prone to convulſions. Hence mercury is apt to have dangerous effects upon them. With ſome medical people, as well as parents, this medicine is much employed as a vermifuge: it has the advantage of being eaſily diſguiſed, and if joined with a purgative, acts very briſkly, and commonly brings away many of the vermin. But worms being only the conſequence of a weak condition of bowels, mercury, when continued long, inſtead of correcting the cauſe, tends ſtill more to debilitate the firſt paſſages, and lays the foundation for much ill health. I ſhall touch on this part further, in the treatment, as being intimately connected with my inquiry. In the mean time, I cannot ſufficiently reprobate the conduct of ſome perſons in high life, who permit their names to be publiſhed in the handbills and advertiſements of an illiterate quack, whoſe worm medicine is known to be mercury, and liable to be given in very unequal doſes, from the nature of the compoſition.

About twenty years ago, two children of a

friend of mine, took calomel from the family apothecary, for worms. The exact doſe in which it was given I do not recollect; but the motions which it produced were innumerable. The family, during this proceſs, were all at once alarmed, by the ſingular noiſe which the children made in their throats, with an unuſual change of countenance and caſt of the eyes; which were quickly followed by violent agitations and contortions of body, and laſtly convulſions. In a few days theſe odd complaints diſappeared, as the effects of the mercury abated: but the apothecary thought proper to repeat the calomel, obſtinately contending that the fits were mere affectation, and not to be imputed to the medicine. The ſame effects however appeared after the ſecond exhibition; the evacuations were not leſs profuſe and debilitating, and the convulſions more frequent and ſevere. The moment one child was ſeized, the other was affected in like manner: ſo certain was this kind of nervous ſympathy, that there was a neceſſity for ſeparating them, that they might not ſee or hear one another, and the fits went gradually off. One of them, a young lady, has been long a martyr to the moſt painful nervous complaints; and I can-

not help thinking that much of this indiſpoſition was brought on by this vermifuge proceſs.

This mineral, after long uſe, beſides exhauſting the nervous energy, is known to affect the bones, and render them friable, juſt as they are found in rickets and in old age. A poiſon ſo ſubtle and active, thus conſumes the vigor of body, and brings on premature ſenility. Theſe hideous effects are moſt probably produced by the mercurial oxide firſt depraving the digeſtive powers, preventing aſſimilation of the chyle, and vitiating ſanguification. On the whole, while mercury is capable of great good in the hands of the ſagacious phyſician, when indiſcriminately uſed by the ignorant of the profeſſion, it muſt do incalculable miſchief.

BITTERS and AROMATICS. Theſe articles when well timed and directed with judgment, are valuable medicines in treating the diſeaſes now under diſcuſſion. But like many of the other good things in life, are too often miſapplied, and thus tend to confirm what they were meant to remove. I here uſe the term *bitters* in a greater latitude than is commonly done by writers on the *materia medica*, and include the celebrated Peruvian bark, and

thoſe ſubſtances which are allied to it, either in their effects or ſenſible qualities. Their office is to ſtrengthen and ſtimulate. The cinchona (bark) itſelf is a medicine, now-a-days in ſuch general uſe, that there are few diſeaſes to be met with in this country, in which it is not given at one period or another; and it is to be found in every family medicine cheſt. An article poſſeſſing ſo much active quality in the human body, as to be capable of ſuſpending a ſevere ague-fit, cannot be deemed a paſſive remedy, or what ought to be truſted in every perſon's hands. The pharmaceutical treatment of cinchona is alſo worthy of conſideration. When duly prepared, and ſuited to the condition of ſtomach, its powers are invaluable; whereas admininſtered in an improper form, it may have moſt baneful effects. It is recommended by ſome authors in doſes ſo large, as in our practice were never ſeen expedient, or the ſtomach capable of retaining them. It is therefore to be ſuſpected, that in certain diſeaſes, pain, ſickneſs, and vomiting ſupervene its uſe, and that the effects of oppreſſion about the ſtomach after a large doſe, have not unfrequently brought on ſuch a degree of torpor, as to

terminate in death. On the coaſt of Africa, where intermittents aſſume a more aggravated form than ever ſeen in Europe, I always found, upon an average, ſix drams of the powder given in eight doſes, for four hours before the acceſſion of the cold ſtage, at half an hour's interval, have more effect than eighteen drams given in twenty-four hours before the fit. This was a great ſaving of the medicine, which is worthy of attention by naval or military ſurgeons on foreign ſtations.

Nothing in the practice of phyſic can be more irkſome than to ſee a poor patient ſtruggling to get over his bitter potion; it ought at leaſt to caution the phyſician againſt an unneceſſary allowance of medicine, for it muſt often defeat its purpoſe. When convaleſcent myſelf of fever in the Weſt Indies, I was ordered a doſe of bark every hour; but ſuch was my averſion to the medicine, and ſuch the irritable ſtate of my ſtomach, that the fourth doſe always brought on ſickneſs and vomiting, by which the whole was diſgorged. I tried from day to day to go on with my quantum: it was all in vain; and at laſt the very ſight of bark made me ſick. If ſuch a ſchool cannot

teach a phyſician ſympathy, I know not how it is to be done.

Thoſe articles, more ſtrictly called *bitters*, require ſtill more caution in the exhibition, as poſſeſſing the power of exhauſting the excitability of the ſtomach by long uſe. They impede fermentation in the *primæ viæ*, and correct acidity; theſe they effect chemically. When long continued, as in the hiſtory of the Portland powder for gout, they are ſaid to produce palſy and dropſy, and every ſpecies of nervous debility. There muſt therefore be a period when the good effects ceaſe, and which careful obſervers will mark. If *bark* and *bitters* are medicated by alcohol, in the form of tincture, it is obvious the hurtful effects, after a certain time, muſt be inevitable.

The *aromatic ſubſtances*, among which may be reckoned all the ſpices and volatile oils uſed in either diet or medicine, by repetition become hurtful to the ſtomach, whether as condiments, with food, or to cover the diſagreeable flavour of ſome articles. Theſe ſubſtances have, therefore, a limited time to do good, that their uſe may not become habitual. There is always ſomething wrong in thoſe

ſtomachs which hanker after hot ingredients: when theſe perſons are ſerved with watery preparations of medicine, they complain that they are too cold, and diſagree with them; but the moment a ſpiritous tincture is ſubſtituted, there is little danger of its being refuſed. It is the duty of every honeſt phyſician to reſiſt thoſe cravings of his patient, and to endeavour all in his power to correct hurtful propenſities.

Vegetable Acids. It is a well known fact, how much theſe acids weaken the organs of digeſtion. They are often drank clandeſtinely by corpulent young women, to correct obeſity, that they may preſerve their ſhape. This is always accompliſhed at the expence of health: cramps and pains of the ſtomach, morbid acidity, and eructations, bowel complaints, ſallowneſs of complexion, nervous head-achs, fainting fits, amenorrhæa, fluor albus, ſtrangury, &c. follow this practice, and death frequently happens. All perſons ſubject to indigeſtion, the gouty and hyſterical, know well from experience, the bad effects of native vegetable acids. They may be ſuppoſed to act directly on the fibres of the ſtomach: but if they act chemically on the

gaſtric juice and bile, they cannot fail of vitiating the chyle, preventing the aſſimilation of the different inteſtinal juices, and thus depraving the nouriſhment. But it may alſo be ſuppoſed, if not in ſome degree certified, that in paſſing the glands of the meſentery, they cauſe obſtruction and enlargement of them, give a diſpoſition to ſcrophula, and otherwiſe injure the whole habit. Vegetable acids have thus a directly oppoſite tendency to the mineral acids, ſuch as the ſulphuric, muriatic, and nitric, all of which have a ſhare of reputation, in ſtates of weakened digeſtion.

Narcotics. Theſe include ardent ſpirits, opium, and all thoſe articles commonly called anodynes, hypnotics, paregorics, &c. ſuch as lactuca, bang, belladonna, hyoſciamus, laurus ceraſus, cicuta, &c. Of the effects of ardent ſpirits, in producing ſtomach and nervous complaints, I have treated largely in my Eſſay on Drunkenneſs, to which I refer the reader. * All the articles now enumerated, act very much alike on the human body. In ſmall quantities, they induce vigor, activity and ſtrength, and an increaſe of

* Second Edition, London, 1805.

muſcular power throughout the frame; at the ſame time are felt ſerenity, pleaſure, and courage of mind. In larger doſes they bring on ſleep, ſtupor and delirium; and when carried to the utmoſt quantity, inſenſibility, apoplexy and death. It is of little moment in this inquiry, whether narcotics ought to be conſidered as directly or indirectly ſedative. They are forbidden in all inflammatory diſeaſes, where they certainly do harm in the firſt ſtage: they generally occaſion conſtipation, but hyoſciamus has a laxative quality. When long continued, they are known to weaken the nervous ſyſtem in a ſurprizing degree; diſpoſing to amentia, epilepſy, palſy, tremors, convulſions, melancholy, madneſs, &c. No ſubſtances in nature more certainly injure the powers of digeſtion, and bring on all the ſevere ſymptoms of nervous infirmity. This effect of narcotics, is moſt likely primarily derived from the nerves of the ſtomach, with which they come firſt in contact, and from thence extended to the other viſcera. Where there is a prediſpoſition, or hereditary nervous temperament, or gout, the permanent uſe of them is ſtill more quickly hurtful: in ſuch ſtates of the body, they ought, like vinous

ſpirits, never to be preſcribed but from neceſſity.

Opium, the nobleſt attribute of Medicine, ſo calculated by its powers to ſweeten life, and ſuſpend pain, when all earthly comforts avail nothing, has its limits in doing good. It is a misfortune when it comes to be diſpenſed by injudicious hands; for it is often preſcribed by the moſt ignorant, in diſeaſes where it is forbidden. The bodily complaints of the human race, when enervated by luxury and refinement, ſeem to produce more acute pain; at leaſt the temperate man is obſerved to bear ſickneſs with more patience and reſignation, than thoſe accuſtomed to indulgence. The ſpirits are apt to flag, as if the mind had no reſting place. Opium alone gives relief, though it muſt feed the diſeaſe. Such perſons ſeem to compound with their phyſician for ſound nights, and days of eaſe; and if he does not comply he muſt be changed. Hard is the taſk impoſed on the medical attendant; he muſt obey, or ſtarve. The *night draught* thus becomes familiar in the family: the ſervant goes to the apothecary for it with as little ceremony as he buys kitchen ſalt. He ſees the ſhop boy count the drops into the phial, and when he gets

home, narrates the compoſition of the placebo to the cook and the nurſemaid. Not a domeſtic in the houſe but ſoon learns what a fine thing laudanum is; and maſter ſwears he can get no reſt without it.

If ſuch things did not exiſt, how comes it that ſeven young women in this neighbourhood, within the laſt three years, ſhould have known that a large doſe of this tincture will kill. Two of the number effected their purpoſe. I was called to viſit another in Percy Street; ſhe had ſwallowed twelve drams of laudanum; but I arrived before it had been twenty minutes in her ſtomach, and by plentiful dilution with vinegar and water, followed by an active emetic, the bad effects were prevented. I remained in the houſe till I was ſure that every drop of the opium was diſcharged, and ſhe did well. It appeared that theſe poor girls had become the dupes of deſigning men, and called for death to end their ſufferings. Thus the doſe of opium concludes what was begun in the circulating library. A little more ſecrecy and diſcretion are certainly wanted in the general uſe of this dangerous narcotic.

But there is reaſon to believe, that even

medical men themſelves, have of late, entered too eaſily into the indiſcriminate uſe of opium. He muſt be a ſhort-ſighted phyſician that does not calculate upon the ultimate effects of his preſcription: it is a weak excuſe for getting quit of the importunities of a patient, by complying with an improper requeſt, that may afford temporary eaſe, at the expence of permanent health. In the nervous temperament it is particularly hurtful. I am acquainted with numbers of ladies that feel ſuch horror at taking opium, as nothing can equal; and in every illneſs they may labour under, conſtantly warn the medical viſitor againſt giving it, as no diſguiſe can make it agreeable to them. But when opium happens to be ſoothing to weak nerved people from their quick ſenſations it is apt to be the more craved for, and converted into habit. The langour and dejection which follow its operation pave the way for the repetition of the doſe, till general debility ſucceeds. In ſuch conſtitutions, the exhibition of opium ought never to take place on ſlight occaſions. Midwives, nurſes, and other perſons out of the medical profeſſion, who diſpenſe laudanum at random, ought to be ſolemnly warned againſt it.

The *opium-eaters* in Turkey, are the moſt pitiable objects in ſociety. Their ſqualid looks and emaciated bodies, after a long courſe of this narcotic, evince how fatal its uſe is to the digeſtive organs, and how it prevents the due aſſimilation of nouriſhment. On diſſection, the ſame effects appear in the ſtomach, liver, and bowels, which follow a long courſe of ardent ſpirits. Like the dram-drinker alſo, when deprived of his wonted cordial, they are languid, faintiſh, low-ſpirited, nervous, and feeble. Their limbs totter under them; their heads and hands tremble, and the very wind is in danger of overſetting them. Their faculties ſeem exhauſted, the memory fails, and the only remnant of intellect which they poſſeſs, appears in the frightful accounts which they give of their horrors, and the hypochondriacal glooms with which they are infeſted. No form of diſeaſe exhibits exiſtence under a more deplorable ſhape than the *opium-eater* and *dram-drinker*. There is great reaſon for ſuſpicion, that this drug is daily getting more into uſe as a cordial, and privately conſumed by numbers of perſons. It is well adapted, from its preparation in tincture, to be carried about, and drank at pleaſure. Its exhilirating quality

creates a momentary heaven for minds who find nothing but guilt and deſpair in their own reflections: hence it has grown ſo general in high life, and in faſhionable circles. I am alſo of opinion that many ſudden deaths are in the preſent times, occaſioned by this drug, without exciting the leaſt ſuſpicion of its being taken. Thoſe who accuſtom themſelves to the narcotic article called *bang*, in the Eaſt Indies and in the Turkiſh dominions, are ſaid to periſh under diſeaſes ſimilar to thoſe of the opium-eater.

Tobacco is another narcotic in common uſe. Perſons who are in the habit of chewing, ſnuffing, or ſmoking this Indian leaf, are not aware, that a few grains of it taken into the ſtomach, cauſe ſudden death. Nay the ſmoke of it injected into the rectum, has frequently proved fatal. It acts powerfully on the nervous ſyſtem, deſtroys the ſenſibility of the ſtomach; and it is obſerved that thoſe who devour it in great quantity, die of apoplexy, palſy, and dropſy.

Poisons. All kinds of poiſon, ſo called, whether taken from the animal, vegetable, or mineral kingdom, if not immediately fatal, weaken or deſtroy the functions of the ſtomach,

derange the nervous ſyſtem, and bring on nervous diſeaſes; ſo certainly are the digeſtive organs the firſt to ſuffer, and ſtand from their office as centinels of life.

Bleeding. Numbers of perſons labouring under nervous debilities, attribute the firſt appearance of their malady to large bleedings, or evacuations of blood from other cauſes. No fact is better known to the medical obſerver than that frequent convulſions are a common conſequence of the large loſs of blood. The nice connection between the circulating and nervous ſyſtems, cannot be well explained, but they act reciprocally on one another. It is equally clearly aſcertained, that men or women of the nervous temperament, bear the loſs of blood ill. Indeed it ſeldom or never happens, that their diſeaſes indicate the practice: when done, it has commonly been through the ignorance of ſome ſtupid attendant. Abortions, and ſevere floodings after child-birth, are often traced as the beginning of painful and lingering nervous affections, that ſometimes remain for life.

Reflections on Medicines. Phyſicians having wiſely drawn the line between medicine and diet, the former can only be indi-

cated in ſome of the diſeaſed conditions of the body. There are a multitude of articles in *materia medica*, beyond what I have thought proper to animadvert on here, poſſeſſing equal activity to thoſe enumerated. Some of theſe may be ſuppoſed to have a chemical agency on both the ſolids and fluids; while others appear to act more immediately on our ſentient parts. It is evident, then, from the moſt accurate obſervations, that ſuch ſubſtances ought to be exhibited with great caution, and their operations watched with the moſt punctual attention. Many of the metallic ſalts, the mineral acids, all the alkalis, ſome of the neutral ſalts, and many ſimple remedies taken from the vegetable kingdom, are of this deſcription. The niceſt ſtudy of the phyſician muſt be that at the bed-ſide of his patient; in obſerving the phenomena of diſeaſe; developing the genius of a diſtemper; unfolding peculiarities of conſtitution; ſelecting medicines for theſe indications of cure, and diſcerning their action and appreciating their power, that he may be enabled to proceed on the ſame plan of treatment, or adopt another. Nature has endowed ſo few minds with that ſuperior intelligence of being equal to this taſk, that we cannot be

ſurprized when told, that medicine is ſtill in many reſpects "*a conjectural art.*" Where men do not all poſſeſs the ſame ſagacity, cultivated talents, and extenſive acquirements, they muſt think and reaſon differently, on ſubjects which bear no reſemblance to other human purſuits; and concerning which no appeal can be made, without overſtepping the bounds which divine Providence has preſcribed for the ingenuity of mankind.

CHAPTER IV.

Influence of theſe diſeaſes on the character of nations, and on domeſtic happineſs.

It is a fact fully confirmed in the hiſtory of mankind, that a ſimilarity of manners has marked all nations, in their progreſs from rudeneſs to refinement; in their riſe and in their decline. An infant ſtate is commonly poor: but from intercourſe with its neighbours, it learns the advantages of a change of produce and commodities; and this traffic ſoon gives ſpring to ingenuity, and birth to adventure. Amidſt its articles of utility, it alſo imports ſome that are ſhowy and elegant: the arts of inventing new ſources of gain, being natural to the human mind, gradually extend; till luxury in all its ſhapes, appears in the manners, amuſements, and government of every commercial people. The arms of imperial Rome ſubdued the world, and made that city the emporium of wealth and grandeur, drawn from all other nations. Luxury, crimes,

and irreligion, were ſoon the conſequences of power overgrown, and riches unbounded. And this haughty, wicked people, when they had loſt their moral virtue and dignity, and with theſe, their phyſical ſtrength, became a prey to barbarous hordes; who, undebauched by refined pleaſures, found the enervated Romans an eaſy conqueſt. Let Great Britain look to this example. The Eaſt and Weſt Indies at this moment, are a theatre of oppreſſion and ſlavery, to gorge her with commercial wealth; and a diſtrict of Africa, larger than Europe, is made a field of blood, to purchaſe the natives for cultivating her colonies, whoſe produce only tends to weaken her manly character, and overwhelm her with nervous infirmities! *

The riſe and fall of a large commercial town, may be taken as an example of a na-

* Since this work was printed, the Parliament of this country, after twenty years heſitation, has aboliſhed the helliſh ſlave trade. This act was chiefly owing to Mr Fox making it a miniſterial queſtion. Thou perſecuted ſtateſman! this deed will embalm thy memory while chriſtianity is our national religion; and thy meek ſpirit will find its reward in Abraham's boſom!

tion. From a few fiſhermen's huts, on ſome river, or arm of the ſea, it gradually extends and improves, till the exchange for buſineſs, and the theatre for amuſement, become its ornaments. A narrow port is by degrees, widened into a capacious harbour: and the warehouſe, manufactory and ſhop, increaſe in proportion, till wealth and elegance dazzle in every lane and alley. The coffee-houſe, the inn, and the tavern, grow neceſſary appendages to buſineſs and pleaſure: the morning begins with a bargain, and the evening cloſes with a banquet. Then the rout commences, to teach the young the arts of gaming: and the midnight maſquerade initiates them into the wiles of intrigue. The riot diſturbs ſleep; the drunkard is ſeen ſtaggering home, in danger of robbery and death; and the woman of the town, deſerted by her deſtroyer, is ſeeking repriſals, and looking for prey in the ſtreets. Now the hoſpital and bedlam appear in the ſuburbs; the firſt to receive the poor, ſick, and lame; and the other to confine the more wretched in mind. The phyſician and apothecary are ſeen gliding in their chariots, with retinues ſometimes not much like men who are converſant with human affliction, and en-

riched by the luxuries and vices of their fellow mortals. Morals and health are alike committed in this vortex of wealth and diſſipation. The induſtrious man who began the world with a capital of fifty pounds, who roſe at five, and went to bed at nine, who dined on a plain joint and pudding, and drank nothing ſtronger than table beer, does not find a fortune of fifty thouſand pounds exempt him from gout and nervous torments. A crouded population multiplies all contagious maladies, but eſpecially fevers of the worſt kind. Faſhionable pleaſures, ſuch as towns only afford, are a fruitful ſource of weakneſs and pain: and drunkenneſs and mercurial courſes, of themſelves, produce more wretchedneſs and diſorders, than the whole natural infirmities of life. Under theſe circumſtances, the human frame muſt degenerate in both body and mind, as we ſee in modern Egypt, Turkey and Italy. Thus flouriſhes the commercial town or ſtate, till its wealth and effeminacy weigh it down; when it falls like Tyre or Alexandria, like Corinth and Carthage, to be a retreat to robbers, and a den to wild beaſts.

As we analyze the manners of ſociety, and ſcrutinize thoſe cauſes which lead to the diſeaſes of which we treat, we obſerve their ope-

ration and influence to be very general, and daily increaſing. Commercial Britain, enriched by manufacture and colonial wealth, when compared with her barbarous ſtate, does not exhibit a nobler ſpirit of independence, or ſhow more fortitude in oppoſing French invaſion, than what was done nineteen hundred years ago, by our forefathers, in repelling the Roman legions. Our invaders were then obliged to build ſtrong walls and ramparts to ſhelter them from the Britons: * but modern Britons have erected Martello towers, projected the inundation of Eſſex, and hoarded up the current gold coin, as tokens of being afraid of the French. Theſe alarms are to be conſidered as ſo many ſymptoms of a nervous temperament appearing in our national character. Britain had no ſhips to oppoſe the landing of Julius Cæſar; but at this moment ſhe has a navy capable of fighting the whole fleets of Europe united; yet ſhe trembles at a flotilla of cock-boats! It is that puddle of corruption, the Stock Exchange; that Delphi of Plutus, where ſtock-brokers pay their vows, and expound prophecies, that

* The walls of Adrian and Severus.

has filled the nation with degenerate fears, apprehenſion, and hypochondriaciſm. Europe has been ſaved by the Britiſh navy from the fangs of French tyranny; yet ſhameful to be told, after the fleets of France have been annihilated, we are now to be aſſailed by three thouſand wherries, manned with *blue devils!**

If I am altogether correct in ſaying, that the *nervous temperament* is hereditary, and therefore the diſeaſes which depend upon it, liable to be extended to the offspring, they muſt multiply in prodigious proportion. They appear in the preſent age to have acquired that growth, which nothing but a general revolution among all ranks of ſociety can check. I

* *The gentlemen of the Stock Exchange*, as they denominate themſelves, are projecting great things from the conqueſt of Buenos Ayres. Spain, humbled, degraded, pillaged by an imperial cut-throat, is almoſt blotted out of the map of Europe; which ſhe owes to the gold and ſilver brought from the new world. Yet theſe *gentlemen* ſeem to entertain no fears for the like fate happening to Great Britain. Such is the patriotiſm of money-lenders!—Sept. 14, 1807. It is to be hoped the melancholy accounts juſt received from the army in South America will be ſome check to the avarice of theſe ſtock-jobbers; this trading expedition, it now appears, is annihilated at the expence of 2000 brave men!

may be told, that theſe diſeaſes are not very dangerous, and very ſeldom produce death; and it may be added, the bills of mortality do not juſtify my concluſions. Theſe arguments are eaſily anſwered. It is true, death is ſeldom put down to nervous diſorders: but if conſtant pain, mental diſquietude, and apprehenſion of dying, are to be conſidered as evils in this ſtage of exiſtence, then are nervous afflictions to be held as the chief cauſe of them. And it is to be remembered, that the moſt frightful part of the catalogue of diſeaſes, ſuch as apoplexy, palſy, madneſs, melancholy, epilepſy, convulſions, colic, iliac paſſion, atrophy and dropſy, are often uſhered in by nervous affection, before they aſſume their own character and ſhape. Phyſical ſtrength of body cannot be long preſerved under enervating modes of living: the ſtature and the mind muſt both diminiſh and degenerate. The poet ſays, *fortes creantur fortibus et bonis;* and very aptly adds,

—— nec imbellem feroces,
Progenerant aquilæ columbam. HOR.

An eminent ſenator, Sir John Sinclair, has lately made ſome noble attempts to regenerate

the phyſical ſtrength of the country, by recalling mankind to agricultural life. His inſtitution of a ſociety for that purpoſe, under the authority of parliament, has already had conſiderable effect. Many noblemen and gentlemen, of great landed property, have ſeconded theſe patriotic views, and turned their attention to this national object: a ſpirit of improvement has appeared in every county, and is daily increaſing. No man who poſſeſſes the ſmalleſt ſpark of love for his country, but muſt wiſh full ſucceſs to the undertaking. No truth in political economy is better proved, than that a nation of ſedentary people can never be a nation of heroes. We might, indeed, preſerve all our manufacturing eſtabliſhments, and moſt of the fine arts, during the degeneracy of phyſical courage: but could an army of man-milliners defend the Britiſh iſlands againſt the ruffians of Bonaparte?* The puny inhabitants of Italy and Indoſtan are finer ſpinners of ſilk and cotton than Engliſhmen, becauſe they are ſtrangers to all the maſculine virtues. Let us therefore beware how we extol too much the effeminate

* Non his juventus orta parentibus, &c. Hor.

labours of the ſpindle and the loom. A commercial people merely, can never be an independent nation. They owe to foreigners the conſumption of their manufactures; and when theſe chuſe to do without them, or to buy them elſewhere, ſuch a people muſt become bankrupts in finance. The glory and ſecurity of the United Kingdom, muſt be to blend theſe purſuits, agriculture and commerce, in the national character.

From the imperfect ſtate of medical hiſtories, which have come to us, from the early ages of the world, we are left much in the dark, how far luxurious living and effeminate cuſtoms affected the health of nations. We are told of their vices and debaucheries ariſing to exceſs; and theſe ſeem to have generally been forerunners of their fall and decline. When the form of republican government in Rome, yielded to the tyranny of the Cæſars, with it the republican virtues gave way to the vices of courts; and the Romans, ſoon after, loſt their character for military proweſs. It is therefore but fair to infer, that the faculties of ſoul, and the vigour of body, underwent immediate changes; and that a train of diſeaſes of a peculiar caſt, ſprung up among this

debaſed people. Hence the modern enervated inhabitant of Italy muſt be very unlike the ancient warlike Roman. The youth of the one is ſpent in learning muſic, painting and frippery: the other was early trained to bear fatigue, hunger, thirſt, running, leaping, ſwimming, &c. Diſeaſes of the ſame claſs could not therefore exiſt, in conſtitutions ſo different in habit and prediſpoſition. The rural life alſo occupied a conſiderable portion of time with the Roman worthies of the old republic. All the Latin claſſics abound with beautiful eulogies on ruſtic manners, ſcenery and recreation, particularly Virgil, Horace, and Pliny the younger. The greateſt man whom modern ages have produced, George Waſhington, was of this ſchool. How much nobler was it to retire from the command of a victorious army, after ſecuring the independence of his country, for the ſtudy of nature in his own farm, than to live in a city to learn exciſe laws, and ſqueeze taxes from induſtry, to pay profligate favourites, and unprofitable wars. How mean and contemptible the upſtart emperor of France appears, when compared with this truly chriſtian hero, the friend and admiration of human kind!

The diſeaſes of a labouring and active peaſantry, or of thoſe of any condition of mankind, expoſed to the weather in all ſeaſons, are almoſt confined to the inflammatory claſs; ſuch as pleuriſy, acute rheumatiſm, catarrh, cynanche, &c. Theſe depend on a vigorous vital power, a rigid fibre, and a florid denſe blood: they are a directly oppoſite ſtate of the ſyſtem to what prediſpoſes to nervous diſeaſes. No kind of diet comes wrong to the ſtomach of a hale ruſtic; the unleavened farinaceous meal, or a draught of imperfectly fermented malt liquor, that would throw the dyſpeptic and bilious citizen into a colic, he takes down with impunity. He is alſo capable of braving fatigue, privation of food and ſleep, and every other hardſhip, in a manner that would ſoon deſtroy the town inhabitant. A nation that cannot recruit its ſoldiers from a robuſt and hardy peaſantry, can never bring into the field an army able to endure the toils and adventures of actual war. *

Amidſt the general effeminacy of manners, that is rapidly conſuming the manly ſpirit and

* See Dr Robert Jackſon, the army phyſician, on this ſubject.

phyſical ſtrength of this age, and what may ultimately annihilate all that is great in the character of Britons, it is ſomewhat conſoling to obſerve, that the ſeamen of the navy, that bulwark of our liberties, will be the laſt of the community to feel the effect of thoſe enervating cuſtoms. The naval officer and ſeaman embark in their profeſſion while boys, before they can be acquainted with the ſoftening arts of the day. Hardſhip, danger, and privation, are the lot of naval ſervice: to brave the weather, the ſeaſon, and climate, is their delight and their duty; which, fortunately for their country, grow into habit. Hence they have little enjoyment among the common amuſements of ſociety; and feel that kind of life hang heavy upon them, which gives no birth to action and enterprize. It is true a ſpecies of nervous diſeaſe did make its appearance during the late war. It occurred among both officers and men; but was, by no means, a general malady. * The hard duty of a ſtupid blockade had a chief ſhare in its production.

Stateſmen, I believe, ſeldom or never read the medical hiſtory of fleets and armies. They

* Med. Nautica. vol. 3.

are afraid that ſuch gloomy narratives would alarm conſcience, and bring on fits of hypochondriaciſm.* Yet by theſe means, they might be made wiſer miniſters, if not better men. The practice of *blockade* has crept much into our naval ſyſtem of late; yet it was abhorred by Howe and Nelſon, as inconſiſtent with the genius of our ſeamanſhip. But though it may be conducted with eaſe in the equal weather between the tropics, it can never be effec-

* The fate of the *cow-pock* inoculation in this country, is a proof of the indifference of ſtateſmen to the improvement of the health and ſafety of the community. It has been ſaid, that the late miniſter refuſed to become a member of the ſociety for encouraging *vaccination:* and his predeceſſor, the ſon of a phyſician, oppoſed the gift of 20,000l to the immortal author of this matchleſs diſcovery, ſo that the *grant* was only 10,000l.! The preſent miniſters, it is to be hoped, will retrieve the credit of the nation, by beſtowing the merited honours and rewards due to Dr Jenner. See alſo the fate of this diſcovery in a branch of public ſervice, Med. Naut. vol. 3. Since the firſt edition of this work was publiſhed, a parliamentary gift of 20,000l. has been beſtowed on my learned friend; in which grant Mr Chancellor Percival found himſelf in the *minority*, to the eternal honour of the preſent Houſe of Commons.

tive in the ſtormy ſeaſons of European ſeas. Such a mode of ſervice is calculated to pleaſe underwriters and ſtock-brokers, but it can never be acceptable to the officer and ſeaman. A duty ſo ſevere, without variety to give ſpring to adventure, benumbs the faculties, exhauſts the bodily powers, and in habits prediſpoſed, brings on nervous irritability that ſhortens the ſpan of life.

It has been gravely aſſerted, and with much probability of truth, that during the reign of *terror* in France, in the late revolution, a period marked by fury and blood beyond whatever was known in a civilized country, all diſeaſes, uſually called nervous, low ſpirits, or hypochondriaciſm, quickly diſappeared. Theſe diſeaſes are ſo nearly connected with the tenor of the mind, that great commotions in the moral world may both induce and remove them. But if, as we contend, they are chiefly the offſpring of a life of ſloth and inaction, violent popular tumults, that rouſe anarchy and ferocious paſſions, and let looſe the furies among mankind, cannot fail of making ſtrong impreſſions on the timid and deſponding. All phyſicians converſant with theſe diſtempers, are aware, that a correſponding train of thought

attends the bodily diſorder; and that it is a preliminary ſtep to the cure, to infuſe activity of mind, ſo as to force new ideas on the patient. We have heard of a fit of the gout being inſtantly cured by the alarm of fire; and the perſon confined, throwing his crutches away to eſcape from the danger. Nervous perſons, in different families, have been ſuddenly relieved by unexpected good fortune coming upon their near relatives; and the indiſpoſition has again recurred by the return of a freſh diſaſter: and all ſtrong emotions while they laſt, have more or leſs the ſame effect in ſuſpending or removing both the mental and corporeal ailment.

The South Sea ſcheme of 1720, that bubble of commercial ſpeculation, gives a curious example of the Engliſh character. It was remarked at that time, that more inſtances of madneſs appeared, than at any former period.* In ſhort, numbers became maniacs, from the ſudden wealth which fell to them: theſe were probably of the nervous temperament. The tranſition was too great and quick for the ſenſibility of particular conſtitutions. This ſcheme having ſoon failed,

* Dr Mead.

it is likely that hypochondriaciſm and low ſpirits would ſucceed to an equally ſudden reverſe of fortune; but of this we are not told.

A naval officer, while abroad in the late war, received a letter from his ſiſter, telling him, that his ticket in the lottery had come up a prize of 20,000*l.* He was ſo elated with the news, that he became inſtantly delirious; leaped from a wardroom window into the ſea, and was drowned. The Athenian ſoldier, who ran to the city covered with duſt and blood, to announce the victory of Marathon, was ſo overpowered at the event, that he could only call out, "*Rejoice with the victors*," and immediately expired. In like manner the Roman mother died ſuddenly, on hearing that her ſon had ſurvived the battle of Cannæ. It is probable all theſe perſons were of the nervous temperament, from being ſubject to ſuch violent emotions. Bad news, ſuch as the death of wives and huſbands, or children, however ſuddenly told, or happening unexpectedly, do not ſeem to operate like exceſſive joy. Grief is ſlow in producing derangement of mind; and is nearer to what we call the *mild delirium:* while the

frenzy of joy partakes more of the *delirium ferox*. I have obſerved ſomething like temporary inſanity, in ſeveral officers, who had at once been elevated from extreme poverty to a fortune, by prize-money. Men who have been wealthy, and afterwards reduced to indigence, often ſink into deſpondency and low ſpirits. But it is alſo true, that perſons who have unexpectedly received great riches or legacies, are apt to turn hypochondriacal by being lulled into eaſe and ſecurity, and having no longer cauſe for action and enterprize. I have known habitual drunkenneſs in a family, that brought on ſome of the moſt afflicting nervous ſymptoms, completely overcome on a ſignal misfortune befalling a brother; and nothing beyond water uſed afterwards. Such a fact totally diſproves the reaſoning of thoſe phyſicians, who tell us it is dangerous to ſubtract the ſtimulus all at once. The mind that is ſtable, by a firm nervous ſyſtem, is little ſhook by the incidents of life: whereas the fickle conſtitution of nerves bears unequally every viciſſitude; but ſuſtains ſorrow and diſappointment, better than joy and good fortune. Thus the moral propenſities are to be learned from the phyſical habit; and the

peculiar genius of diſeaſes, unfolded by the paſſions of the individual.

The *nervous temperament*, abſtractedly conſidered, is often the ſeat of diſpoſitions, that appear in two extremes; and giving birth to paſſions of the moſt oppoſite kind. Under the government of a bad heart, it is ferociouſly cruel, or abjectly timid. When men poſſeſſing theſe traits of character, happen to be armed with power, they become the ſcourges and butchers of mankind. Such we ſuſpect to have been the temperament of all thoſe tyrants, whoſe reigns have been marked by murder and outrage in the hiſtory of nations*. The preſent ruler of a neighbouring people, appears to be a man anſwering to this deſcription. He is ſaid to be ſubject, at times, to the deepeſt hypochondriacal glooms; and while under their influence, his temper exhibits more of the demon than the human being. Jealous of his perſonal ſafety, even to timidi-

* Such were Philip, Alexander, and Julius Cæſar. Philip and Alexander were great drunkards, and conſequently nervous, verſatile, and dyſpeptic. And Plutarch informs us, that Cæſar was ſubject to violent headachs, and frequent fits of epilepſy, a diſeaſe of th nervous temperament.

ty, becauſe he is aware that his plans of ambition are to be effected by blood, and accompliſhed by perfidy, he knows that he cannot be beloved. Through ſlaughter and fraud, he has waded to a throne: and his obtaining the ſceptre, was the ſignal to ſhut the gates of mercy againſt his ſpecies. A ſtranger to every domeſtic enjoyment; unſuſceptible of the tender paſſion; and aloof from all the temperate and ſoothing pleaſures, which ſweeten the ſlumbers of a good man in power and proſperity, this arch-tyrant is ſaid never to ſleep two nights in the ſame bed, from the dread of aſſaſſination. When any ſudden diſaſter befals his projects, without a ſingle virtue to cheer his reflections, he becomes his own tormentor: his bowels are wrung with ſpaſms; the biliary ducts partake of the commotion; and a jaundiced hue of the eye indicates to the ſpectator, the features of ſome devil that has uſurped the human form. Under this ſombre caſt of countenance, his vindictive paſſions brood over crimes, and hatch plots, that he may find victims to glut his deſire for blood. In ſuch moods, he ſends to the guillotine, incarcerates, or preſcribes the devoted loyaliſts of France; anticipates in their fate

the doom of Engliſhmen ; and feels in miniature that gratification, which he longs to experience by the invaſion of Great Britain. Hiſtory tells us of bad men that were born with teeth in their jaws, and of others, whoſe hearts were found hairy: ſuch relations are amiable, if they even aroſe from the folly of ſuperſtition, as they imply the hideouſneſs and deteſtation of vice. And future ages may inquire with avidity, for the phyſiological ſtructure of that breaſt which was ſo ſuperlatively ſteeled, and poſſeſſed paſſions ſo tranſcendently cruel above what is recorded of the common deſtroyers of mankind.

But it muſt be unfortunate for any nation to be governed by a man of capricious temper, even though his paſſions are gentle and mild. A nervous ſtateſman could not eaſily diveſt his public meaſures of ſome portion of his conſtitutional diſpoſitions. He would at times view things through a falſe medium: and by judging from miſtaken premiſes, would conduct the buſineſs of government with imbecility and ſupineneſs, and bring it into contempt. Every plan he deviſed would partake of the mood he happened to be in at the moment: it would be liable to defeat, and

expoſed to oppoſition; in hazard of being divulged before execution, and open to deriſion. The morbid ſenſibility of a deluded hypochondriac, might alarm a people by imaginary dangers; and in the ſeaſon of diſaſter, might bring ruin on affairs by irreſolution and deſpondency. By ſuch men nations have been plunged into unneceſſary wars; and inglorious peace concluded, when advantageous terms might have been obtained. Men endued with an exquiſitely nervous temperament, ought to be baniſhed from the councils of all ſovereigns, however reſpectable their talents; for conſiſtency and fortitude are incompatible with their phyſical character.

In the medical profeſſion, the nervous temperament might alſo ſo affect the practice of the phyſician, as to render it feeble, fluctuating and irreſolute. Diſeaſes often take moſt unaccountable turns, not to be foreſeen or prevented by human abilities. Such ſudden changes not only require firmneſs of mind and addreſs, on the part of the attending phyſician; but his conduct and example may ſo affect the patient, as to bring on a fatal deſpondency. Hence the value of confidence in the medical friend. To a ſick perſon, who

thinks himſelf in danger, nothing is ſo diſtreſſing, as to behold fear and diſtruſt in the countenance and deportment of his medical director: a nervous frame is therefore very inadequate to ſome ſituations of this office.

But in the common tranſactions of life, nervous people are difficult to be managed. Their tempers are fickle, their ſpirits unequal, and their attachments equivocal. In buſineſs they are indeciſive, unſteady, and impracticable. Their friendſhips are often puerliſh, and their reſentments unmanly. Amidſt domeſtic connexions, they are apt to teaze their relatives by the obſervance of trifles; while concerns of importance are frequently degraded by an ill-timed levity. Much of their time therefore is ſpent in making conceſſions to others, for the inordinate ebullitions of paſſion; or in torturing themſelves by groundleſs fears, or imaginary affronts. At one moment, you find them obſequious and compliant; grateful for correction, and gentle on being reminded of their duty. But this even tenor ſeldom laſts long; and they grow impatient of contradiction, and furious from reſtraint. Theſe tranſitions are commonly ſudden: the ſame wavering and capricious principle of action, appears to direct

alike the healthful and the morbid ſtate. We behold them one day, taking leave of their friends with all the ſolemnity and earneſtneſs of dying men; and in imagination ſuffering worſe than death: while on the next, they will be ſeen plunged into diſſipation, faſcinated with pleaſure, and attending every faſhionable amuſement.

On the other hand, the *nervous temperament* is often found to be the ſoil of numerous virtues: the nobleſt feelings are cheriſhed here. Senſibility to exceſs marks the conſtitution; and affliction cannot addreſs it without meeting its ſympathy. It is this degree of feeling, that too often makes it the ſport and victim of paſſion. It loves and hates beyond bound. Hence thoſe corroding ſorrows, which ſometimes overtake the moſt tender of all attachments, and which ultimately bring the poſſeſſor to the grave. In adverſe circumſtances nervous people eaſily deſpond, and ſink under misfortunes, which if oppoſed by patience and firmneſs, might be happily overcome. In this temperament of the ſentient ſyſtem, a genius for the elegant arts chiefly originates. The poet, painter, and muſician, may be juſtly ſtyled *genus irritable vatum*. We here meet with

the whole eccentricities of ſuperior endowments, often blended with the moſt abject purſuits; ſublimity and debaſement frequently mixed in the ſame character. Cheyne, in his Engliſh Malady, facetiouſly remarks, "I ſeldom ever "obſerved a heavy, dull, earthy, clod-pated "clown much troubled with nervous diſor- "ders, or at leaſt, not to any eminent degree; "and I ſcarce believe the thing poſſible, from "the animal economy and the preſent laws of "nature."—p. 180.

On the whole the influence of theſe diſeaſes is often great on national character, and domeſtic happineſs. When wealth and luxury arrive at a certain pitch in any country, mankind cannot remain long ſtationary in mental qualifications or corporeal ſtrength. Domeſtic peace is firſt invaded by aſperity of temper and turbulent paſſions. Vices and diſeaſes are cloſe attendants on riches and high living. All theſe gradually extend among the community; and the circle widens, till it engulphs a whole people; when poliſhed ſociety may be ſaid to bring on its own *dotage*, and to dig its own *grave!*

CHAPTER V.

Hiſtory and progreſs of theſe diſeaſes.

A methodical hiſtory of theſe diſeaſes, at leaſt a narrative of the ſymptoms as they appear in ſucceſſion, is almoſt impoſſible. They aſſume ſuch variety in form and manner in different perſons, that we look in vain for regular order. The only thing certain and peculiar in their character is *prediſpoſition;* which may be divided into *hereditary and acquired.*

1. By *hereditary prediſpoſition* is to be underſtood an original conformation of body, tranſmitted from the parent to the offspring; by reaſon of which, when particular exciting cauſes are applied, a ſimilar train of morbid phenomena takes place. A prediſpoſition may therefore appear long before any ſymptom of actual diſeaſe has ſhewn itſelf: as in the phthiſically diſpoſed, a perſon will be eaſily affected by weather and ſudden changes of

temperature; and on ſlight occaſions, liable to cough, hoarſeneſs, tightneſs or ſtitches of the breaſt, &c. The hereditary diſpoſition to the diſeaſes in queſtion, may be marked in the firſt ſtages of infancy in many caſes: in others not to a later period, or till particular cauſes bring forth the latent peculiarity. The child born of nervous parents, that is to ſay, perſons of weak digeſtive organs, and irritable nervous ſyſtem, ſubject to bilious and ſpaſmodic complaints, &c. will, at the breaſt, be very liable to bowel affections, ſuch as cardialgia, flatulence, conſtipation, or diarrhœa, gripes, yellow gum or jaundice, &c. Theſe will be apt to come on from ſlight occaſions, as when the milk of the nurſe is affected, either by her paſſions or improprieties of diet, or when any thing has entered its food that is difficult of ſolution in the ſtomach. Theſe cauſes will frequently operate with ſuch effect, and to ſuch a degree, as to induce convulſions and death.

As the child grows up, the tendency to theſe complaints, will be more perceptible on ſlight deviations from its regular modes of living. If it meets with badly fermented bread, heavy pudding, eats too freely of fruit,

ſweetmeats, pye-cruſt, all kinds of paſtry, pound cake; or drinks of cyder, perry, beer, wine, punch, &c. the ſtomach and bowels will be quickly diſordered. At the ſame time a peeviſhneſs and fretfulneſs of temper will appear, extreme irritability, want of ſleep, ſleep diſturbed, with other nervous ſymptoms, till the offending cauſe has been corrected in the firſt paſſages.

In ſome of the diſeaſes of infancy, ſuch a child will ſuffer more than other children. At the teething period, it will be more likely to be ſeized with bowel diſorders and convulſions: in the eruptive fever of the ſmall pox, it will be more prone to theſe fits: and in the hooping cough, as being a ſpaſmodic diſeaſe, the nervous infant will be a ſevere ſufferer. Frights of all kinds, that ruffle the temper, and impatience under bodily pain, will be attended with irritable paſſions. Worms are the conſequence of weak bowels and diſordered digeſtion; a child of this deſcription, will therefore be much troubled with worms, and generally their moſt troubleſome ſymptoms. Theſe ſymptoms will ſometimes put on all the appearance of a confirmed *hydrocephalus internus*, even to the laſt degree of

ſtrabiſmus. I have ſeen ſo many inſtances of recovery from this apparently hopeleſs ſtate, that I am diſpoſed to refer the whole to their inteſtinal vermin, or to ſome aggravated attack of ſtomach affection, depending on original nervous prediſpoſition. It appears indeed to me, from a multitude of caſes, that this diſeaſe is purely the offspring of this temperament; and when fluid is found in the ventricles of the brain, it is to be conſidered as the *effect* rather than the *cauſe;* for death has often happened where no water could be detected.

At the age of *puberty*, if a female, it will be liable to be affected with that diſeaſe uſually called *chloroſis;* which, beſides ſo many ſymptoms of dyſpepſia, combines with it the *emanſio menſium.* The *chorea*, or St Vitus's dance, alſo appears about this age: and in numerous caſes which I have ſeen of both complaints, I am diſpoſed to think, that they *never* occur without manifeſt prediſpoſition, and are therefore to be conſidered rather as ſymptoms of the nervous temperament, than diſtinct diſeaſes. The changes which now take place in the conſtitution, conjoined to the quick growth of the body at the ſame time, will render this a moſt critical period. At this ſeaſon, the ner-

vous woman is firſt affected with hyſterics; theſe added to many painful ſymptoms of increaſed irritability, will be apt to recur at *diſtinct intervals*, through life, particularly if unmarried. Extreme delicacy of ſtomach, dyſpeptic affections, and what are called bilious, dyſuria, leucorrhœa, hemicrania, &c. with other nervous ſigns, will be the lot of this hereditary prediſpoſition.

The female that is born of *gouty* parents, comes entirely within this deſcription. The fact is notorious, that what is called *regular gout*, or gout ſhewing itſelf in the extremities of the body, ſeldom attacks the fair ſex: and when it happens, the woman is marked by a more maſculine form, or other external ſigns indicating this peculiarity. But even this will not explain why the female is ſo ſeldom affected with arthritic inflammation. Something may perhaps be ſought in the generative faculty: the *caſtratos* are ſaid to be exempt from gout: regular gout is very rare before the age of puberty; and all the women whom I have known ſubject to inflammatory gout, except one, had never borne children. Gout, in all its ſhapes, is preceded by ſtomach affection; ſo alſo is the *period*

Again, the ſtomach recovers as the pain and inflammation fix in the joints; and if they prematurely recede, the affection of the ſtomach returns. It is the ſame with the *period:* when one goes on properly, the other declines in due time: and if cold, paſſions of the mind, or other cauſes, bring on a ſudden ſtoppage, all the complaints of the digeſtive powers inſtantly recur.

But as the dyſpeptic ſymptoms which attend gout, are ſo much alike in both ſexes, making allowance for the greater ſenſibility of the female, they ſtrongly ſupport the idea, that the chylopoeitic viſcera are the *original ſeat* of this diſeaſe; and theſe the primary ſymptoms of gouty diatheſis. The child therefore, who is born of arthritic parents, has in its conſtitution what may be called the predispoſition to nervous and bilious diſeaſes. In infancy it is prone to all ſtomach and bowel complaints from ſlight cauſes, as have been deſcribed, and theſe will be its attendants through life. Even the man of the gouty family will not be exempt from this diſpoſition to be dyſpeptic and bilious, on every kind of exceſs or improper indulgence. In both ſexes, they ſhow a ſtronger tendency, as they

appear early; for that proves a weaker ſtructure of the digeſtive powers, and greater debility of frame; juſt as gout is to be more dreaded in proportion to its attack at an early age. Thus the youngeſt votaries of Venus and Bacchus will run greater hazards of immature gout, and premature decrepitude as a conſequence.

2. The other diviſion of prediſpoſition to theſe diſeaſes, is the *acquired prediſpoſition*, or what may be brought on by cauſes which eſpecially weaken the frame of nerves, and the chylopoeitic organs. This prediſpoſition may take root, even during the earlieſt ſtages of infancy, in children born of the healthieſt parents. The effects of the milk of an unwholeſome nurſe often lay this foundation. It may happen when the child is not ſufficiently nouriſhed; where the nurſe is much affected with the diſorders herſelf; if ſhe drinks too freely of ſpiritous or fermented liquors, or is in the habit of taking opium or other drugs. Bad lodgings; impure air; hot rooms; chills from expoſure to cold; waſhing the infant in water too cold or too hot; want of cleanlineſs; doſing it with hot things, whether ſpirits or aromatics: frequent opiates in any form to make it ſleep;

the uſe of tea; deficient exerciſe; ſweetmeats; frequent recourſe to medicines, ſuch as emetics, and purgatives, but particularly calomel: and if theſe articles are often repeated at any ſtage of childhood, unleſs competently preſcribed, they muſt infallibly debilitate the ſtomach and bowels, and induce the diſeaſes in queſtion. To all theſe cauſes may be added, the effect which the furious paſſions of ſome women have on the infant they ſuckle. But even children at an early age, are not beyond the reach of moral cauſes, particularly females, and theſe will often operate with great force on ſenſible minds.

The girl whoſe health has been thus ruined by improper nurſing in infancy, or bad treatment in childhood, will be apt to ſuffer at *puberty*, and at the *change of life*. At the former period, violent hyſteric and chlorotic affections will commence, and health will be precarious for a length of time. Such a woman will be generally liable to ſterility from conſtitutional infirmities; to abortion in the early months, and to premature births: theſe will often happen from ſlight cauſes; and much danger will be encountered during parturition and in the puerperal ſtate. Other

diſeaſes of equal delicacy, which are too often the bane of female life, will be the portion of ſuch a woman. Theſe girls acquire an inactive ſedentary turn in early age, which is ſeldom overcome; they ſeem to vegetate rather than live, and but rarely reach to fifty years. When women of this kind of habit ſuckle their own offspring, or that of others, they much injure the health of the infant as well as themſelves: ſuch children commonly die in great proportion under two years; and if they ſurvive that age, it is with indelible marks of a puny and vitiated conſtitution. Among the poor in large towns, the proportion of deaths in infancy is great, chiefly owing to vicious nurſing; and much cauſed by that nervous weakneſs brought on by the uſe of tea and ſpiritous liquors.

The *acquired prediſpoſition* is alſo the frequent effect of preceding diſeaſes and confinement; ſuch as typhus fever, and all the fevers of tropical climates. Luxurious living, and highly ſeaſoned food, that weaken and exhauſt the digeſtive powers: exceſs of animal pleaſure; courſes of active medicines long continued; ſuckling the babe till weakneſs and emaciation take place; ſevere labours; hæ-

morrhages; diſappointed love, revenge, or ambition; confinement in impure air; want of exerciſe; intenſe thought; long protracted grief; frights; a long ſtate of ſuſpenſe in waiting the deciſion of ſome important event; the improper uſe of opium; fumes of metals, as quickſilver, lead, or copper; ſpiritous liquors, and other narcotics; poiſons of every kind in ſmall doſes; and in ſhort, whatever greatly diſturbs or debilitates the whole nervous ſyſtem and abdominal viſcera.

Wounds and injuries of the head, concuſſions of the brain, and whatever may induce effuſion and compreſſion, ſo as to weaken the organs of ſenſe and motion, or render them unequal in their action, ſometimes bring on a nervous temperament, or at leaſt pave the way to theſe diſeaſes. Theſe incidents are common enough among our ſeamen and ſoldiers, and now and then to be met with in private life. *

Having now fully deſcribed the nature of prediſpoſition under theſe forms, we are prepared to relate, what, in common language,

* Convulſions in the form of epileptic fits, are common enough after organic leſions of the brain. They have been frequently relieved by the trepan.

goes by the name of a *nervous complaint*, or a *bilious attack;* expreſſions frequently heard among all kinds of people. But without prediſpoſition in ſome degree, it is to be preſumed, that no perſon has at once been ſeverely afflicted with theſe diſeaſes. The two kinds of prediſpoſition which have been inveſtigated, conſtitute what modern phyſicians have called the NERVOUS TEMPERAMENT, for it is not mentioned by old writers.

A perſon ſubject to *nervous or bilious complaints*, has commonly ſome warning of an aggravation of the ſymptoms, or of an *attack*. Some uneven tenor of the ſpirits; ſomething to ruffle the temper or paſſions; or ſome irregularity in diet, moſt frequently precedes them. In the ſex, theſe complaints, for the moſt part, commence near the *period*, and when not ſevere, decline with it. A frequent deſire of micturition, or a profuſe diſcharge of limpid urine very often uſhers in the attack, in both ſexes.

The patient himſelf finds it difficult to deſcribe his uneaſy ſenſations, for want of language: he knows not with what ſymptom to begin, though he will anſwer the queſtions of the phyſician with ſufficient correctneſs. The

phyſician therefore, finds advantage in putting queries to the patient, as a few leading ones will often ſave both much embarraſſment and converſation. The mind is irritable, fickle, and apprehenſive; at one moment, tenacious of impreſſions, ſuſpicious and jealous of contradiction: at another, hurrying from one thing to another: grave and gay by turns; with fits of crying, laughing and incoherent talking; but leſdom indulging in converſation that is unconnected with the conſultation. The deſire for food commonly fails; an unpleaſant taſte is perceived, which excites frequent ſpitting; ſickneſs at ſtomach ſometimes comes on very ſuddenly, with vomiting of green ſour mucus, or of bilious matter. What is thrown up is often found ſo acrid and corroſive as to excoriate the throat and mouth, and ſlightly tinge ſilver; the fauces and tongue have been bliſtered from this cauſe, ſo as to appear full of pimples, or little ulcers, that render maſtication of the food painful, and deglutition impracticable. The bowels are generally irregular, either conſtipated or the contrary, and oppreſſed with flatulence. Acidity, eructations, and dyſpnœa, ſpaſmodic twitches about the breaſt, back and loins, ac-

company theſe feelings. It is often ſurprizing to ſee the degree of inflation of ſtomach at this time; coming on ſuddenly, and remaining for hours. The ſkin is dry, and conſtricted, or in profuſe ſweats; the whole ſurface of the body unuſually cold, or uncommonly hot by turns; with vertigo, tremors, riſings in the gullet, and vaſt depreſſion of ſpirits. The patients are extremely ſenſible to the changes of weather, and bear eaſterly winds ill.

The countenance is commonly downcaſt and ſallow; and the white of the eye exhibits, more or leſs, a bilious tinge. Few dyſpeptic perſons have at all times a clear complexion; indeed the looks are a ſure criterion to judge of the habit. This ſuffuſion of bile ſometimes amounts to real jaundice, tranſitory, or more permanent; and attended with pain about the epigaſtric region, extending upwards from the liver to the ſhoulder, and generally with conſtipation. Theſe icteritial ſymptoms are ſpeedily moved by laxatives, though briſk purges may be neceſſary, with which conſiderable quantities of inſpiſſated bile and mucus are brought away, and alſo *biliary calculi*, called

gall-ſtones, which ſometimes obſtruct the ducts.

Paſſions of the mind, or whatever greatly and ſuddenly diſturbs the digeſtive powers, bring on jaundice. But the ſallow complexion of the nervous temperament, is not always expreſſive of bile being carried into the blood. It probably originates alſo from imperfect ſanguification; and when the florid colour is deficient from ſubtraction of oxygen, or oxygen not duly ſupplied. When the yellow tinge of the eye proceeds from bile, it may be detected by dipping a thread or linen rag into the urine, which will be ſtained yellow. I think women are much more liable than men, to the ſpaſmodic form of this complaint; which may ariſe from their weaker ſtate of bowels, and greater irritability of nervous ſyſtem.

The liver itſelf is capricious in its office: we perceive at one time, a ſuſpenſion of the biliary ſecretion, when no obſtruction of the ducts is to be ſuſpected; and at another, the bile is flowing in great profuſion, ſo as to regurgitate by the pylorus, and be evacuated in quantity by vomiting; while it paſſes by the other way in increaſed proportion. Warm

ſeaſons are known to produce this effect on the liver of nervous people.

A particular laſſitude, liſtleſſneſs, and inaptitude to all kinds of motion, and mental exertion, are common attendants of theſe affections. The patients will ſit for hours in the ſame poſture, without paying the leaſt attention to what is going on around them. Even the calls of hunger are diſregarded, and without force they are not rouſed from their *reverie* and *ennui*, to take food.

Convulſive *aſthma*, often recurring periodically, is to be enumerated among the attacks of theſe diſeaſes. Indeed the true aſthma is perhaps never met with, but in conſtitutions of great nervous irritability. Such to a certainty muſt be that ſpecies of it which is induced by particular ſmells. I knew a lady, who was always ſeized with aſthma, whenever rad. ipecac. was pounding in the ſhop; ſo ſenſible was ſhe of this effect, that it was in vain to conceal from her what was going on in the mortar.

When ſpaſms aſſail the *kidneys*, there is often much acute pain in the loins; increaſed on moving the body, and lying on a ſoft feather bed; extending downwards by the

ureter to the bladder, occaſioning conſtant or very frequent deſire to make water; producing the ſymptom called ſtrangury; ſometimes with a pain of the mammæ in women, or retraction and pain in the teſtes in men, and a numbneſs of the thigh and leg. The irritability in theſe parts is often ſo conſiderable, as to force blood from the paſſage of the urethra: the urine is even at times totally ſuppreſſed, and obliged to be evacuated by a catheter. When the urine is made in ſmall quantities, it is high coloured, letting fall a copious muddy ſediment; but at intervals it is voided in great profuſion, and pale as common water*. The urine not unfrequently depoſits an uncommon quantity of mucous ſediment, ſometimes ſtreaked with blood; at other times more dark coloured and even black. The ſtools alſo, are occaſionally, in a great meaſure compoſed of mucous matter. I know ſome gentlemen who experience this on every attack of indigeſtion; and independent of any preceding venereal affection.

When great flatulence and diſtention accompany theſe ſhades of the complaints in the

* Diabetes Hyſtericus.

urinary paſſages, a very uncouth appellation has been beſtowed on them, viz. *windy gravel.* Though an odd kind of term, it would ſeem, however, to convey a very emphatic meaning of the patient's feelings.

Pain and fulneſs of the mammæ in ſome women uſually accompany the *period:* but theſe pains have at other times continued for months; and I have met with inſtances, wherein the female was ſubjected to ſevere courſes of medicine, under the idea of impending cancerous diſpoſition. Such affections often ariſe from pure nervous ſympathy, and yield to proper treatment. I have alſo known ſwellings of the teſtes, and other pains of the male genitals, treated by incautious medical people, as Lues Venerea; which to me appeared to originate from a nervous temperament, and yielded to a treatment that ſtrengthened the digeſtive powers. What is called *ſeminal weakneſs*, is a part of theſe complaints, in which caſes, delicate and ignorant perſons are too apt to truſt themſelves in the hands of the moſt unprincipled of all *quacks*, till their health is completely ruined.

Weakneſs of the eyes, even to total blindneſs, being a common attendant of nervous debili-

ty, has ſometimes been miſtaken for other diſeaſes, and a mercurial courſe adminiſtered not only without relief, but adding to the malady.

Though at times the appetite for food is deficient, yet at others it is exceſſive, and craving after many out-o-the-way things. Hence thoſe longings that occaſion great anxiety to the patients and all about them; as there is commonly a neceſſity for indulging them more or leſs. Deficient appetite, and other impediments to chylification, ſometimes diſappear on eruptions coming upon the ſkin, and alternate with them. It is commonly judged prudent not to repel theſe; as it is held dangerous to dry up iſſues at once, or any other drain.

There is often acute pain about the region of the ſtomach, bending the body forward; it gets the name of *cramp*, and is attended with vaſt dejection of ſpirits, and ſyncope. This ought always to be conſidered an alarming ſymptom; and I have generally found ſuch caſes terminate fatally on a ſudden. But fainting fits otherwiſe, indicate little danger: women frequently fall down without any warning, and recover in a few minutes as if nothing had happened. It has been told of

different perſons remaining for a number of days without external ſigns of life; a ſituation which never came within my knowledge, and almoſt exceeds my belief. Dr Cheyne relates the caſe of Colonel Townſhend, who had ſuch command over the vital functions, that he could ſuſpend them at will, or die when he pleaſed, and recover again. In the company of another phyſician, he ſaw this officer go through the experiment and recover himſelf: but Col. T. did not long ſurvive theſe intereſting trials.

Worms are common enough in all ſtages of theſe diſeaſes, but are particularly ſo among women and children, as the conſequence of a weak condition of bowels and impaired digeſtion. The ſymptoms which point out the preſence of worms in the body, are chiefly of the nervous kind; but urine of a chylous conſiſtence and colour, or reſembling milk, is ſeldom known but from this cauſe. Itching of the noſe; gnaſhing the teeth; ſtarting ſuddenly from ſleep; change of colour in the face; foul breath, &c. ſometimes accompanied with fever and convulſions, all denote worms.

It is probable that the diſeaſe called *colic*, is only an attack of theſe affections in a particular

part of the inteſtines. The *ileus, or iliac paſſion*, is the laſt degree of this afflicting diſorder; which conſiſts of an inverted action of the whole inteſtinal tube, ſo as even to evacuate clyſters by the mouth.

From the exceſſive thirſt obſerved in ſome caſes of nervous affection, it would appear there muſt be at times an uncommon conſumption of liquid in the ſtomach, whether from the increaſed action of the abſorbents, or other cauſes. This great abſorption, in the firſt paſſages, is one way to explain the attending conſtipation; as the more fluid parts being taken up, the remainder is propelled with more difficulty. I knew a lady who was ſo tormented with *polydipſia*, that a pitcher of water was carried with her in her rides.

Uneaſy flutterings, as they are called, about the breaſt, and palpitations, with the ſenſe of a ball riſing to the throat, and there giving the feeling of ſtrangulation, form what has been named *globus hyſtericus*. In theſe the patient grows vertiginous, and blind, and falls down, often in violent agitations and convulſions, with loud ſcreams, and looks expreſſive of horror. This paroxyſm is moſt apt to be brought on by ſurpriſe, a fright, or whatever excites

ſtrong and ſudden emotions: loſs of voice, for a time, is a common conſequence. This fit was long thought peculiar to the fair ſex; but Dr Sydenham mentions it as occurring among men; and it is certain that many males of very mobile habits, and gouty conſtitutions, where there is great ſenſibility of the firſt paſſages, are very liable to it. I have known it in numberleſs inſtances among naval officers, eſpecially thoſe who had ſuffered in warm climates; and alſo among ſeamen, as told in my 3d volume of Med. Naut.

That ſpecies of convulſion called *epilepſy*, can ſcarcely be ſaid to differ from the hyſteric affection, unleſs in its violence. They both occur in a ſimilar temperament of body, and are brought on by the ſame cauſes; and it is agreed by phyſicians, that the neceſſary ſteps to the cure of both are alike, that is, to correct the prediſpoſition.

I have alſo ſeen a conſiderable number of caſes of nervous affection, with all the ſigns which are ſaid to mark *angina pectoris*. This complaint has been thought to accompany particular organic affections of the heart and large blood veſſels; ſome of theſe I have ſeen, and they proved fatal. Of this kind was the

caſe of the late Captain Fiſher, of the Powerful. But theſe organic derangements could not be the cauſe of the ſymptoms, in caſes which quickly recovered under appropriate treatment. Two of theſe I have met with in Newcaſtle. I cannot therefore help being of opinion, that the anomalous form of the diſeaſes under diſcuſſion, renders it very probable, that they have often given cauſe for unneceſſary alarm, as reſembling what has been ſtyled *angina pectoris*. Some forms of nervous affection bear ſo ſtrong a reſemblance to an ague, that I have frequently known them to be treated as ſuch; and violent remedies adminiſtered under the idea of their obſtinacy. But a careful ſcrutiny of the prediſpoſition is the beſt method for correcting the errors of the practice.

It is not eaſy to combat the fancies and apprehenſions of nervous people when under ſtrong paroxyſms of their diſeaſe; while theſe laſt, they are to be conſidered as alienations of mind, and treated accordingly. In ſome ſituations of this kind, the flatulence is unuſually troubleſome, and ſo fluctuating in its movements over the abdomen, that the ſenſation of air or wind, riſing upwards to the brain, is

among the moſt ſolemn beliefs of the patient. This fanciful idea has given birth to the phraſe *vapors*, a name for weak nerves. Theſe vapors are therefore ſaid to generate every thing in the brain that is *terrific or ridiculous*. Hence *blue devils*, *ghoſts*, *and hobgoblins*, have been conjured up to the affrighted imagination of the patient; and bad men are ſaid to ſuffer under their influence, torments compared with the pains of hell: ſo faithful and certain are the admonitions of conſcience! Sleep diſturbed and haraſſed by dreams of the moſt frightful ſort, ſuch as falling down precipices, ſuffering ſhipwreck, being devoured by wild beaſts, are common enough on theſe unhappy occaſions. Some hiſtories of the effects of vapors, are as old as the days of Galen. Are *noct-ambuli* of the nervous temperament?

Another train of tormenting ſymptoms are thoſe head-aches which accompany nervous diſorders. Sometimes only one ſide of the head is affected, and the pain receives the name of *hemicrania:* when it is in the forehead, and gives the ſenſation of a nail being driven into the bone, it has been called *clavus hyſtericus*, as being peculiar to the hyſterical. But this laſt kind of pain is not more confined

to women than the *globus ;* males are alſo ſubject to it. A nervous head-ache in the occiput, is often attended with a ſenſe of coldneſs ; as if very cold water, or a current of cold air, was poured upon the part. Vertigo, to ſuch a degree as to make the patient fall down, dimneſs of ſight, *tinnitus aurium*, partial or total deafneſs, are aſſociated with theſe complaints. Theſe head-aches frequently ſeize perſons at regular intervals, and have obtained the name of *periodical head-aches*. Acceſſions and intermiſſions of pain that acquire regular movements, muſt depend on ſome important law of the ſyſtem ; and here they are probably directed by the digeſtive proceſs.

To this claſs of ſymptoms may alſo be referred, that ſingular and obſtinate pain of the face, called *dolor facei*, or *tic doloreux*, by the French. It is ſaid to have been once cured by Dr Haighton, of London, by dividing a branch of the *fifth pair* of nerves, which was ſuppoſed to be the ſeat of the pain. But medicine muſt become a bloody art indeed, if the organs of ſenſe and motion are to become ſubjects of ſurgical operations. Flatulence, conſtipation, and nervous feelings, are known to be attendants of this pain : it affects chiefly

women, and thoſe above thirty; but it is not confined to a particular ſpot of the face. It is doubtful to me, whether this tormenting affection is ever met with but in the nervous conſtitution; at leaſt in ſuch only has it come under my obſervation. I cannot therefore ſee any reaſon for conſidering it a diſtinct diſeaſe; for it has always been relieved by the general method of cure, though it is apt to return.

Pains, cramps, and contractions of the joints and muſcular parts, are not uncommon ſymptoms: but the moſt painful are thoſe of the calves of the legs and ſoles of the feet. I have a patient now, a man of large ſize, who is drawn to the one ſide, and the muſcles of the abdomen contracted into irregular lumps. This man is ſtrongly affected with hypochondriaciſm; is jealous of his ſafety, and aſks my ſervants if they ever hear their maſter ſpeak of him. * He inherits the temperament from his mother.

* This poor fellow, who lives 30 miles from Newcaſtle, lately aſked me by letter, whether I thought he ought to go into a lunatic hoſpital, as he conſidered himſelf inſane?

Perſons ſubject to theſe diſeaſes are very liable in advanced life to hæmorrhoidal tumours, and *procedentia recti;* which at times are moſt afflicting ſymptoms, as they prevent all kinds of motion or exerciſe. Theſe are too often the unfortunate conſequences of frequent purgatives, eſpecially of the mercurial and aloetic kind; which tend moſt to weaken the bowels and bring on a conſtant teneſmus.

It is the nature of theſe diſeaſes to pervert the regular economy of both body and mind. We therefore frequently hear patients expreſs ſenſations, as if they had no bowels, and all was vacuum within them. A friend of mine of an exquiſite nervous temperament, a clergyman and elegant ſcholar, expreſſes this ſenſation, as if half of his body was joined to the other like a waſp. So ſenſible are they at times to arterial pulſation, that they ſay they have pulſes all over; and count the ſtrokes of the heart without applying the fingers to an artery.

When dyſpnœa, with cough and hoarſeneſs, is preſent, it is of conſiderable importance to diſtinguiſh how far theſe form a part of nervous indiſpoſition, for phthiſis frequently ſuper-

venes without much cauſe of ſuſpicion. When irregularity of the *period* accompanies theſe pectoral ſymptoms, they become ſtill more equivocal. Even the expectorated matter only helps to create doubts. But there is a kind of cough, that has not inaptly been called *nervous cough*, which conſiſts of a ſhort hick, ſomething approaching to a hoop, and not attended with much fixed pain of the breaſt: nor does the difficulty of breathing which accompanies the nervous cough, give the ſenſation of ſo much fulneſs of the cheſt, or oppreſſion; but rather a feeling that the cells of the lungs refuſe to admit the air. The nervous cough is alſo more affected by the paſſions than that of phthiſical perſons. The family prediſpoſition will enable the phyſician to form a correct prognoſis on moſt of theſe occaſions.

I have ſeen ſome obſtinate hiccups, in both ſexes, in theſe diſeaſes, that reſiſted every thing that could be thought of; nor did they intermit, for ſome weeks, except during ſleep.

Hydrophobia has been met with in theſe diſeaſes, and where the dread of ſwallowing liquids was little ſhort of what has been obſerved in *canine madneſs*. I believe in all ſituations where deglutition is difficult, when

not owing to mechanical compreſſion, it is found more painful to ſwallow liquids than ſolids. The *hydrophobia* of Rabies, is to be conſidered as a nervous ſymptom, expreſſive of the inverted action of the oſophagus and muſcles of the pharynx. The dread of water is therefore to be explained, from the impreſſion which the mind receives on looking at the water, as aſſociated with the act of ſwallowing it under the reverſed motion of the muſcular fibres which perform deglutition. It muſt be nearly allied to the *globus hyſtericus*. It is ſtrange that anatomiſts ſhould look to the pharynx and gullet, for the ſeat of hydrophobia; which muſt be imputed to the *ſenſorium commune*, and is not to be detected by diſſection. I have however frequently known the throat ſo contracted, and the tongue ſo cumberſome in the mouth, that nothing but ſlops was taken down for months, under nervous indiſpoſition.

In general, nervous perſons are bad ſleepers. In ſome caſes ſleep is neither felt nor wiſhed for by the patient; whole nights being paſſed without it. But we have alſo ſeen a continual drowſineſs and inclination to ſleep prevailing ſymptoms. If lying long in bed is much

indulged, it is apt to terminate in a ſoporoſe diſeaſe; for ſleep, like other cuſtoms, grows upon us by uſe, and leads to fatal conſequences.

The ſtate of the pulſe in theſe diſorders, is as variable and inconſtant as all the other ſenſations of the patient. It is ſometimes regular and equal, in conditions of great pain and ſuffering: and at other times, is found uncommonly quick, unequal, irregular, and intermitting, when the ſymptoms are very moderate. It may be preſumed, from theſe affections being primarily ſeated in the nervous ſyſtem, they only affect the vital functions at intervals. I have certainly known the pulſe remain with little variation from health, in ſome fatal caſes, till within a few hours of diſſolution. Yet nervous perſons in general, have a quick pulſe; and in ſome inſtances it has been noticed at 200 in a minute. * Their ſenſes being all uncommonly acute, a ſudden noiſe or ſtart quickens the pulſe, and produces palpitation in an inſtant.

But the moſt formidable aſpect which theſe diſeaſes aſſume, is when they have laſted ſo

* Whytt.

long, as to bring on fatuity, or imbecility of mind, melancholy, and madneſs. Among drunkards in particular, theſe kinds of termination are very common; and we impute them to the diſorganization of the brain itſelf. * For in theſe caſes, whatever cauſes an increaſed determination of the blood to the head, increaſes the delirium; this is obſerved particularly with regard to ardent ſpirit and opium. But nervous people commonly die of apoplexy, palſy, atrophy, dropſy or convulſions.

I have forborne to mention many of thoſe idle ſtories, which ſome authors take delight in telling, as the effect of extravagant illuſions of fancy, which nervous people are ſaid to be ſubject to. I hold their whole complaints to have a real exiſtence: and from whatever cauſe pain may ariſe, it is the province of the phyſician to employ his art to ſubdue it; not to ruffle an irritable mind by unſeaſonable levity, or expoſe a morbid ſenſibility to inſult and reproach.

* See the account of the diſſection of inebriates, where the cerebrum was found diſeaſed.

Essay on Drunkenness, 2d Edition.

Diſſections have not forwarded our knowledge of theſe diſeaſes: and indeed when we conſider the nature of their ſymptoms, ſymptoms flying from one organ to another in an inſtant, and thought ſucceeding thought, with the rapidity of lightning, we are the more inclined to think that inſpection of dead bodies will not improve our method of cure. It is true, that the ſtomach, liver, pylorus, inteſtines, meſentery, kidneys and bladder, and the uterine organs in females, have at times been found diſeaſed; but ſuch deviations from the healthy ſtate, muſt in general be ſecondary ſymptoms, the effect, not the cauſe, of theſe ailments. In the tranſitory jaundice of dyſpeptics; or in the migrating cramps, globus, or ſtrangury of the hyſteric affection, what phyſician would look to organic leſions for their ſeat? Perſons are known to die of the moſt dreadful ſymptoms of theſe diſorders, where nothing could be diſcovered by the knife: * which, with all other circumſtances attending them, confirm the belief, that their *pathology* is to be ſought for in the nervous ſyſtem; which will be our next taſk to inveſtigate.

* Whytt on nervous diſeaſes.

CHAPTER VI.

The general doctrine of theſe diſeaſes.

The moſt prominent parts of the character of theſe diſeaſes are, that they occur chiefly under peculiar modes of living; are hereditary, and affect in a particular manner, the organs ſubſervient to the preparation of nouriſhment.

It appears from what has been ſaid in the preceding chapters of this work, that they are unknown in the ſavage ſtate; only rarely met with among ruſtics; but are to be found in abundance in large towns, or wherever luxurious habits have diſplaced ſimplicity of living. They are ſo far to be claſſed among mental diſorders, that a *diſpoſition of mind*, not eaſily to be defined, attends every degree and ſtage of them; beginning with uncommon ſenſibility to all impreſſions; peeviſhneſs of temper; irreſolution of conduct; ſudden tranſitions from ſadneſs to joy, and the contrary; ſilent or loquacious; officiouſly buſy, or extremely indolent; irraſcible; falſe perceptions; waver-

ing judgment; melancholy; madneſs: exhibiting in the whole, ſigns of deranged ſenſation.

Theſe diſeaſes receive a ſtronger tincture from the manners of the age, than any others to which the human frame is liable: and when they appear in great numbers, as in the preſent day, they form an epoch in the phyſical and moral hiſtory of ſociety; ſo wide is their range, ſo important their influence on the ſtate and condition of mankind. I have ſeldom known any of thoſe perſons denominated Quakers, to have been ſeverely troubled with nervous complaints. This teſtimony is at leaſt honourable to theſe people; and ſome proof of the good moral conduct and ſobriety which prevail among them.

The *cauſes* which produce nervous diſeaſes, may be divided into two *kinds*, namely thoſe which ariſe from the mind; and thoſe which ariſe from the body. Of the firſt kind, are all the diſorders of the paſſions, of the ſecond kind, all thoſe cauſes which affect particular organs of the body, that by their office, are intimately connected with the nervous ſyſtem. Many of theſe cauſes, of both the mental and corporeal claſs, act for a length of time before

they bring forth actual diſeaſe; but this mode of operation would ſeem to happen only where there was no prediſpoſition. They may therefore be ſaid firſt to create prediſpoſition, and when this is ſufficiently done, a train of ſymptoms appears which conſtitutes real diſeaſe.

To prediſpoſition, whether hereditary or acquired, I give the name of *nervous temperament*, which is now to be conſidered as a permanent ſtate of body, that cannot be eaſily changed, and will commonly remain for life. This temperament is to be obſerved in different ſhades and gradations, mixed with the other temperaments; but where it is exquiſitely formed, it is known by the following ſigns: *a ſenſible, irritable, and mobile condition of nerves; by which different organs of the body, from ſlight cauſes, are urged into violent and involuntary action; and their motions and ſympathy often reverſed; giving birth to falſe perceptions and erroneous judgment; and ſometimes accompanied with pain of the acuteſt kind.* This temperament is ſaid to bear all evacuations ill, eſpecially the loſs of blood; and alſo is eaſily injured by medicines of the rougher claſs; it is not very liable to diſeaſes of the inflammatory

kind*, and ſuffers in an uncommon manner from every exceſs of debauch.

It is evident, from the hiſtory of theſe diſeaſes, that where the nervous temperament prevails, all the cauſes which operate upon it, bring forth motions and ſenſations very different from what is found in a healthful ſtructure of nerves, in perſons who are without the prediſpoſition. This is more exemplified in what may be called the mental cauſes, than in the corporeal. The moral evils of life are very much of a relative nature; their effects depend, in a great meaſure, on our capacity of feeling, for receiving them, or the fortitude which we are able to oppoſe to them. Thus, one man is condemned for ſinking under adverſity, as a proof of deficient virtue and ſpirit; while another is extolled for his courage, as a token that he poſſeſſes nobleneſs of mind. Yet the phyſical trait of their temperaments will beſt decide with impartiality on their reſpective merits. The firſt may be a weak nerved being, and a good man; and the other, under apparent

* Gregorii med. ther. conſpect. vol. ii. chap. xxiii.

reſolution of ſoul, may poſſeſs nothing beyond want of feeling.

But this applies even to the corporeal cauſes. Let the two perſons ſtart together, to drink a bottle of ardent ſpirit in the twenty-four hours, for life. The nervous man will, moſt likely, find his frame ſhook to pieces at the end of two weeks, or as many months; while the other will continue his potation for as many years. When the firſt dies, of weak nerves and tuberculous liver, at the end of three months, the other may ſtill remain ſtrong and hale. It may now be ſaid that the firſt was a drunkard, and died *felo de ſe:* but the ſurvivor will have a chance of preſerving his reputation for ſobriety. Of ſo much importance is the ſtudy of temperament in judging of the cauſes of theſe diſeaſes.

The living body poſſeſſes the faculty, if I may ſo call it, of receiving impreſſions, and retaining them, even to the hazard of its deſtruction. All prediſpoſitions are of this kind. When a perſon ſubject to gout, undergoes a long mercurial courſe for the cure of ſyphilis, he may not be always warned of the increaſe of prediſpoſition, which he will infallibly acquire by this proceſs; though he

may be duly told of the neceſſity for mercury to ſubdue the other diſeaſe. And if it were left to his choice, he would ſtill prefer the antiſyphilitic regimen, and make the beſt he could of his gouty diatheſis. If beſides, he is attached to the bottle, or has contracted the habit of taking opium in large doſes to eaſe his griping pains, he is going faſt on to give the final blow to health; and the laſt degree of this is, the completion of prediſpoſition, or conſtant gout and nervous affliction. So that *prediſpoſition*, in its various ſtages, is the medium between health and diſeaſe. A gentleman ſubject to gout, weak nerves, and all their horrors, conſulted me ſome time ago. He took his wine freely, and an opiate every night at bed-time. The laſt, he ſaid, was to eaſe his ſpaſms, and to give him reſt. He was alſo of extremely ſlow bowels. I warned him of the dangerous habit he had got into; and in order to ſave the remainder of his conſtitution, recommended him to give up his bottle and his laudanum immediately. But the conflict was too great for his fortitude; he did not call upon me a ſecond time. This man, I dare ſay, was both able and willing to pay a phyſician, provided he could find one to his mind. That ſociety muſt be

undergoing the laſt degree of vitiation, where the faculty of medicine receives gold, and returns poiſon!

All thoſe paſſions of the mind, which have been narrated among the cauſes, act immediately on the nervous ſyſtem; whence a train of ſympathetic affections inſtantly commence throughout the whole body, but eſpecially in the chylopoeitic organs. And again, thoſe cauſes which induce nervous diſorders through the body, affect firſt the digeſtive and aſſimilating powers; and are from them reflected on the nervous ſyſtem; whence commences a train of inverted ſympathies and falſe perceptions, which ſhow how far the mental part of us is concerned in this general tumult of ſenſation and motion.

Why a ſtation ſo exalted in the animal economy was given to the chylopoeitic viſcera, we can only account for from the pre-eminence they occupy in preparing the nouriſhment of the whole ſyſtem. The appetite for food, the digeſtion of it, chylification, ſanguification, and the nutriment derived therefrom, are among the moſt wonderful operations of nature. One of the firſt inſtincts of our exiſtence is the deſire of food. Nay,

it is probably the firſt, and coeval with the rudiments of the fœtus. Some peculiar inherent power, not to be expreſſed by abſtract terms, enables the vivified germ to draw nouriſhment from its nidus, the fluid which ſurrounds it. Every particle of the nutritive juices, elaborated by the maternal proceſs, is attracted by the congenial ſympathies of the embryo. Theſe juices hold in ſolution what is to be the future ſolid, ſuch as cellular membrane, muſcle, tendon, bone, and *nerve itſelf*. The nervous ſyſtem, or ſenſorium, muſt be the baſis and the *prime director* of this creative proceſs, till the human form in all its parts is fully evolved. The circulation of the blood, from the mother to the fœtus, now commences, and continues the ſupply, though not by a direct continuity of veſſels. And the placenta, by oxygenizing the fœtal blood, ſupplies the place of the future lungs. When the required bulk is completed, the infant, endued with peculiar inſtinct, urges the womb to expel it, which terminates in the birth. The nouriſhment, which the child received from its mother before birth, is now to be prepared in part by its own organs. I ſay *in*

part, becauſe milk is a ſubſtance half animalized, and nearly ready for aſſimilation.

We thus comprehend *three* ſtages in animal exiſtence, where the manner of receiving nouriſhment is varied. The *firſt* ſtage is limited to that early condition of the germ, before the circulation of *red blood* can be diſtinguiſhed. The *ſecond* ſtage commences with the circulation of *red blood*, and terminates with the *birth*. The *third* ſtage begins with the *birth*, when the nouriſhment of the body is to be prepared by the *chylopoietic viſcera*, which continues through life.

The human ſtomach is an organ endued by nature, with the moſt complex properties of any in the body; and forming a *centre* of ſympathy between our corporeal and mental parts, of more exquiſite qualifications than even the brain itſelf. Yet the knife and eye of the anatomiſt do not diſcover the whole important ſtation it holds in the economy: we muſt look to the living ſyſtem for thoſe nice connexions of cauſe and effect, and that ſource of aſſociation, which give it a relationſhip to ſo many organs, both in the healthy and diſeaſed ſtate. There are few diſeaſes in which it does not participate: even

ſlight blows upon it have proved fatal: but its wounds are to a certainty, mortal. In all thoſe diſorders whoſe ſeat is the nervous ſyſtem, it particularly ſuffers. In fevers of every deſcription the ſtomach is peculiarly affected; and till the febrile movements decline, the functions of this viſcus are ſuſpended.

An organ intended for ſuch important purpoſes in the animal economy, muſt receive from the hand of Nature ſingular tokens of her favour. Hence we find all thoſe viſcera, which aſſiſt in preparing the chyle, and what is called the aſſimilation of the food, joined in a circle of nervous communication, of which the ſtomach is the centre. One portion of nerve is diſtributed over the whole; ſo that while they are all employed in one purpoſe, diſorder cannot take place in any of them, without the whole being thrown into confuſion.

Anatomiſts have diſcovered an unuſual ſhare of nerves about the upper orifice of the ſtomach; from which it was thought by ſome philoſophers to be the *ſeat* of the ſoul.

The nerves of the ſtomach are derived from the *par vagum*, or eighth pair, which communicates with the *great intercoſtal or ſympa-*

thetic ; and by it, is connected with almoſt every other nerve of the body. The *ſemilunar ganglion* of the great ſympathetic, ſupplies particularly the liver ; gall bladder and ducts ; duodenum ; pancreas ; ſpleen ; jejunum ; ileum ; and part of the colon, &c. : the renal glands, kidneys, ureters, and bladder ; the womb, ovaria, teſtes, &c. are all ſupplied by the ſame nerve ; and joined by others from the lumbar vertebræ. The muſcles of the pharynx, and trachea, thoſe of the neck and lower extremities, are even connected by branches of this nerve. The lungs, heart, and diaphragm, being all furniſhed with nerves, which communicate with the *great ſympathetic*, it would appear, that this nerve is the grand link or chain, which *connects* the vital, animal, and natural functions with one another.

When the great ſympathetic enjoys its full health, all the organs to which it is diſtributed will be found performing their different offices with vigour, accompanied with pleaſurable ſenſation. When the ſtomach has been repleniſhed by a full meal, after ſome time, ſleep ſupervenes, which is eaſy and ſound ; and with this commences the proceſs of digeſtion ; the ſolution and expulſion of the food from the

ſtomach; its mixture afterwards with bile, pancreatic juice, and inteſtinal mucus. Every pore, veſſel, duct, or gland, that is engaged in this great buſineſs, contributes a ſhare of ſoothing influence to the dormant animal functions; and the temperate man awakes refreſhed and invigorated in body, with faculties equally clear and renovated. But the dyſpeptic ſtomach exhibits a very different train of phenomena. After the repaſt, ſleep ſcarcely cloſes the eye-lids of the nervous man: a croud of unpleaſing ideas diſturbs the mind; flatulence, acidity and borborrigmi, torment the body; digeſtion goes on imperfectly; and he wakes low, languid, and unrecruited; ſick at ſtomach, and without appetite for breakfaſt.

The *pathology* of theſe diſeaſes is therefore to be chiefly ſought in the functions of this nervous communication; and moſt of the ſymptoms to be referred to the ſame. Thus in a dyſpeptic condition of ſtomach, ſuch as attends nervous complaints, it is not the muſcular fibre alone of that organ that is to be conſidered as diſeaſed; but every gland and pore, exhalent or follicle, that ſeparates either gaſtric juice or mucus; and conſequently all the fluids are poured forth in a vitiated ſtate.

The appetite will then be irregular, ſometimes ſuppreſſed, ſometimes voracious; the acidity will increaſe ſo as to become painful; the food will remain undigeſted, and uneaſineſs, and inflation of ſtomach will ſucceed. Other viſcera will, by conſent of nerves, be alſo deranged in their reſpective offices. The pancreas, its juice and duct are affected. The liver will ſecrete the bile in quantity and quality, both different from its healthy ſtate; and the ducts will be irregular in conveying it forward. The periſtaltic motion of the inteſtines will be inverted and inconſtant; and conſtipation or diarrhœa be the conſequence. Even the kidneys, more remotely connected, will diſcover indiſpoſition, by the urine being voided turbid or pale, in ſpare or profuſe quantity; ſometimes with pain in the loins, ureters, bladder, teſtes, or mammæ. Thoſe uneaſy ſenſations which riſe to the throat, and there give the idea of ſtrangulation, often attend the ſtomach affection. The lungs expand with difficulty, the breaſt labours, the heart palpitates, the eyes grow dim, a giddineſs comes on, confuſion of thought and inſenſibility commence, and the patient often falls down

convulſed. * There is not a muſcle or organ of the body that receives a ſingle tendril of this *ſympathetic nerve*, without partaking more or leſs, in theſe diſeaſed feelings.

But there are not two people who feel exactly alike, in a diſordered condition of ſtomach: and this difference depends on cauſes ſo various, that the idioſyncraſy, or peculiarity of conſtitution, in every individual, muſt be ſought for before it can be explained. Early habits, purſuits in life, modes of living, moral character, preceding diſeaſes, amuſements, profeſſions, ſeaſons, climate, &c. muſt all be taken into the account. Thus one perſon ſuffers by ſevere and obſtinate head-aches; another is prone to hyſteric or epileptic fits; ſome are afflicted with cramps and ſpaſms of ſtomach, others by acidity and flatulence. The liver and biliary ducts, with deficient ſecretion of bile, its increaſed quantity, or obſtruction from ſpaſm, mucus or gall-ſtones, and ſuffuſion of the ſkin, are peculiar to one conſtitution: while bowel complaints, nephritic pains, urinary calculi, and ſtrangury, haraſs another. Nervous females particularly

* Hyſterics, and epilepſy, or falling ſickneſs.

ſuffer at the *period;* in all irregularities of it, from whatever cauſe; and in the puerperal ſtate. Some perſons ſink more under dejection of ſpirits; while others exhibit ſudden viciſſitudes from high to low, and the contrary. Temporary inſanity is more frequent with women than men; and it attends ſome of them during every pregnancy. Yet I hold all theſe, and many other ſhades of nervous indiſpoſition, to be ſtill one and the ſame diſeaſe. Nay we frequently obſerve the family peculiarity to be hereditary; and often diſtinguiſhed by external ſigns, as the child happens to be like the father or mother. The nervous power, in ſome perſons, is precipitate in its movements, tumultuous and convulſive, and gives a hurry to all their actions. Others again appear more ſluggiſh and deliberate, where the nervous power is more torpid; but it is at the ſame time liable to inconſtancy when under the influence of different paſſions.

We know ſo little of the nature of the nervous power, that we can only judge of the moral cauſes of nervous indiſpoſition, from their effects. Some of the paſſions have received the name of *exciting*, and others that of *depreſſing*;

but their effects on the *nervous temperament*, ſeem much alike. The chief of the paſſions, ſuch as anger, joy, grief, fear, &c. deſtroy appetite, diſturb digeſtion, prevent ſleep, make the breaſt labour, and the heart palpitate; render the mind fickle, timid, incapable of judging accurately, &c. Here is no proof that any of theſe paſſions weaken the nervous ſyſtem; they only diſſever that combination, or aſſociation of ideas, which impreſſes the mind with pleaſing objects; and which diſſeverment to the mind is painful, and throws all the more ſenſible organs of the body into immediate diſorder. The mind and body being connected by the *nervous ſyſtem*, the ſame train of ſymptoms appear, when thoſe cauſes are applied to the body, which firſt affect the chylopoietic viſcera; ſuch as a mercurial courſe, or a debauch with ardent ſpirit or opium. Now, what can be the reaſon, that theſe paſſions, or the articles juſt mentioned, have ſuch extraordinary action on nervous people, while on others they have no ſuch effect? I would explain the fact in this manner: the hereditary temperament is ſuppoſed to inherit all the bad impreſſions of its progenitor, hoarded as it were in the ſtructure of its nerves: in like

manner the acquired temperament retains, or records as it may be termed, all the effects of vicious indulgence. So that when any fresh gust of passion arises, or any luxurious stimulus is applied to any portion of the sympathetic nerve, these accumulate the quantum of predispoſition; and a *nervous fit*, or a *bilious attack*, is the immediate consequence of every new trouble of mind, and of every recent debauch of the body. Thus the habit may become so completely nervous, or in other words, the *predispoſition* may arrive at that height, that the faculties of the soul will be worn out, and fatuity take place; and the body will be so enervated as to be in a state of constant pain, tremor or convulsion. Such cases, in no small numbers, are certainly to be seen every day by medical observers who possess discernment to appreciate experience.

The operation of ardent spirit, which includes wine and all fermented liquors, and of opium, if not all narcotics whatever, is much alike on the animal economy. They assail in the first place, the nervous system, and all other effects are secondary. The nerves of the stomach feel the first injury: but so intimately are these nerves connected with the

whole that ſupply the chylopoietic viſcera, that they are inſtantly drawn into conſent. The ſtomach, inteſtines, pancreas, liver and ducts, become thickened, and grow torpid by long indulgence in theſe articles, and unequal to their functions. But it will not be doubted by any perſon who has attentively watched the effects of opium and ardent ſpirit, that all the early ſymptoms of indiſpoſition which they create, are purely nervous, and extended by ſympathy. I was formerly of opinion, that the enlarged liver was owing to the conſtringing power of the alkohol being ſpread from the duodenum to that viſcus through the ducts. But this explanation is not ſatisfactory: and opium, and other narcotics, cannot act by hardening the fibre or animal ſolid. *The hepatic ſyſtem muſt be injured by nervous communication and ſympathy with the ſtomach.* But if it is common in a ſevere diſeaſe, and after long continuance, for the liver of dyſpeptics to be found ſometimes enlarged, where no vinous ſtimulus had been uſed, ſuch a caſe muſt have been of nervous origin to a certainty; and from this we have a right to conclude, that the diſeaſed liver of drunkards is almoſt always of this kind. When the hepatic nerves are rendered weak, mobile, or torpid, by

the exceſſive uſe of alkohol, it neceſſarily follows that this debility is extended to the whole ſubſtance of the liver. There is no proof that an inflammatory ſtage and fever are always the conſequence; on the contrary, I believe inflammation ſeldom happens. The hepatic ſyſtem of inebriates does not appear injured, till a very conſiderable degree of debility has taken place throughout the body: there is a general derangement before this aſſumes any ſignal mark of diſeaſe; and many of the worſt ſymptoms are often preſent, when nothing beyond nervous affection can be ſuſpected. Jaundice has too frequently been deemed a ſign of enlarged liver: but it ſo happens that the jaundice of nervous people has little connection with the liver. * The irritable, or torpid ſtate of the duodenum and ducts, juſt as the nervous power happens to be deranged

* Within theſe four years, of rich and poor who have conſulted me, not leſs than 50 caſes of *ſuppoſed diſeaſed liver*, were of the number. Yet the treatment proved that no fixed hepatic affection was preſent. Many of theſe had their complaints aggravated by the previous uſe of mercury. A gentleman lately applied to me who was under a mercurial courſe for L. V. during which jaundice ſupervened.

in them at the time, is the moſt common cauſe of biliary obſtruction, and conſequent jaundice. Nay the appearance of jaundice muſt often be a proof that the ſecreting office of the liver is perfect. During the inverted motion of the muſcular fibres of the inteſtines, ſo peculiar to the nervous temperament, the opening of the duct that conveys the bile, from its ſingular form, muſt be very liable to obſtruction. And this is thought to be the moſt common cauſe of icterus.

But if the torpid and enlarged liver is thus proved to ariſe from nervous debility, muſt not cure the turn upon an invigorating plan? The firſt ſtep to this muſt be to remove the cauſes which brought it on; in the drunkard, let the bottle be laid aſide *entirely;* let ſuch mental and corporeal ſtimuli be uſed as have a reſtorative quality; and health muſt return, if it can be brought about by human means.

But theſe principles apply with ſtill more force where biliary obſtructions infeſt the female conſtitution. The irritable nervous ſyſtem, and delicate bowels of moſt women, ought to make medical people conſider well before they attempt violent remedies, to overcome obſtruction. The true method of cure

in weakened females, muſt be to ſtrengthen the whole chylopoietic viſcera, by ſuch medicines as communicate permanent energy to the nervous ſyſtem: to obviate ſlow bowels or diarrhœa, to correct acidity and flatulence; to attend to the quality and quantity of the food; to regulate the paſſions; to obſerve ſtrict rules of air and exerciſe; to avoid cautiouſly every exceſs in ſtimulation, whether mental or corporeal: in ſhort, *to reverſe all eſtabliſhed habits, and to force a new train of actions upon the temperament.* I ſpeak from much experience on this ſubject: and it is admitted by the advocates for the mercurial courſe, that they have no certainty of the *ſuppoſed liver affection* being removed; but their patients are at intervals returning to the medicine; and we have known ſome inſtances where ladies of the nervous temperament were *taken very unexpectedly out of their hands*, by what was called the cramp of the ſtomach; a ſymptom that ſometimes follows with a quick pace, the exhibition of mercury. Theſe gentlemen muſt have often met with obſtruction and ſuppreſſion of urine among nervous patients: yet it does not appear that they conſider calomel the beſt relief to the kidneys and bladder. In fact, in moſt caſes, of both jaundice and iſchuria, we

are to look to nervous ſympathy for their cauſe; for they commence and diſappear in general ſo ſuddenly, that *local cauſes* can ſcarcely be ſuſpected. We might as well diſſect the top of the oſophagus for the cauſe of *globus hyſtericus*, as attempt to fix the pathology of theſe verſatile movements in the ſecreting or other organs; or inſpect the brain of a hypochondriac for the picture of his *blue devils*. The migratory power which theſe affections poſſeſs, of traverſing every part of the body, is the inſcrutable *idioſyncracy* of the NERVOUS TEMPERAMENT.

A phyſician of our acquaintance, for many years was ſubject to dyſpepſia, and conceived that he had a *diſeaſed liver*, as he termed it. For twenty years he took calomel in large doſes very frequently; and all this time with a manifeſt increaſe of his complaint. The bowels however came to that torpid ſtate, as to reſiſt every common laxative; and he at laſt got to the enormous quantity of thirty grains of calomel for a doſe. I ſpeak from his own authority. He became weak and emaciated, and at times ſuffered great pain; and ſunk under the debility, which was to a certainty produced by the mercurial poiſon;

for when the body was opened *no liver diſeaſe appeared!*

About eight months ago a medical gentleman conſulted me for various nervous and dyſpeptic complaints. He ſaid his liver was affected; and he had taken calomel, at intervals, by the advice of a neighbouring phyſician, for the laſt twelve years. He had a ſlight bilious look, and evidently poſſeſſed hereditary prediſpoſition; was rather thin, and the bowels in a very irregular ſtate. I recommended the uſual ſtrengthening plan, with horſe exerciſe, and abſtinence from vinous liquors, and opium, which he uſed freely. In a few weeks he got well, and recovered his fleſh. In four months he felt ſome return of his indiſpoſition, and reſorted again to his calomel. But his bowels became more uneaſy, and he felt a conſtant teneſmus. He came again to me, and he ſuſpected when I ſaw him, an incipient aſcites; nothing however appeared outwardly. I repeated my former cautions to him about the uſe of mercury, for I looked upon it as the chief cauſe of his ſufferings. He took the advice of two eminent phyſicians, at ſome diſtance from his home; and they preſcribed mercury. He

began the plan recommended, and died in a few weeks; in my opinion, with a conſtitution deſtroyed by this medicine.

The miſtaken pathology of theſe diſeaſes, it thus appears, had given birth to this unwarrantable uſe of mercury. Such caſes cannot be made too public, in order to caution inconſiderate people againſt the indiſcriminate adminiſtration of a medicine, ſo capable of doing harm: the bowels of theſe gentlemen were evidently reduced by it to a ſtate of palſy.

But however afflicting the condition to which the body is often brought by nervous infirmity, the mental indiſpoſition is the cauſe of greater miſery. To enumerate all the degrees of deranged intellect in theſe diſeaſes, would be a difficult and uſeleſs taſk. They comprehend all that is extravagant in deluſion, or abſurd in fiction. The acute, but too often falſe perceptions of nervous people, are an apology for ſome of the ſtories we hear of apparitions, of magic, and of witchcraft, that have at different times impoſed on the credulity of mankind. Their deluded and vivid imaginations are capable of believing any thing; and inſtances of ſuppoſed ſupernatural agency,

conceived in a dream, have often made ſuch ſtrong impreſſions on the mind, as to be attended by conſequences of great importance, not only to the individual, but to the community. All jugglers and mountebanks find theſe perſons an eaſy prey. The impoſtor Meſmer, who, about twenty-three years ago, exhibited his talents in animal magnetiſm, by exerciſing nervous people at a kind of ordeal which he had invented, found them anſwer all the purpoſes of his deceptions; and many well informed men believed firmly in the truth of his doctrines. Yet the effects which were produced, were plainly owing to ſympathy, and the power of imagination; juſt as we obſerve one nervous lady fall into a hyſteric by looking at another in a fit; or like the two children mentioned before.*

The temper of mind with nervous people, renders them very prone to what is called *reverie*. In the ſunſhine of their ſenſations, much of the time paſſes in contemplating imaginary pleaſures, or what in common language is called, *building caſtles in the air*.

* See the report of the Examiners appointed by the King of France.

And when they are rouſed from this fool's paradiſe, they are very apt to fall into the other extreme, of low ſpirits and apprehenſions. So certainly does a correſponding train of thought follow every odd feeling, in theſe whimſical diſorders.

In the introductory part of this inquiry, we have given a curſory view of the ſavage ſtate, ſo as to ſhew how favourable it is to vigor and health of body. We there obſerve man to paſs through exiſtence with wants ſo few, that he overcomes them by his individual exertions. The ſpot that gave him birth bounds his travels; and his knowledge is confined to the cuſtoms of his own tribe; ſo that if he has little call for bodily labour, he has ſtill leſs for mental acquirements. His diſeaſes are only the infirmities and decay of nature; but of the whole catalogue of ills which infeſt mortal life, he is leaſt in danger of being afflicted with thoſe of the nervous claſs.

But how different is man in the civilized world! He is obliged to undergo a kind of training how to live; to inſtruct him in what he owes to himſelf, and what to ſociety. Where the ſavage feels one want, the civilized being has a thouſand. Devoted either to love

or ambition, theſe impreſs all his actions with extraordinary vehemence, perſeverance, and enterprize. He is no ſooner brought into the world, than he is taught to admire every thing that dazzles, glitters, or makes a noiſe. His very employment is play; and all his toys are either ſhining or ſonorous. Flattery is the firſt expreſſion addreſſed to dawning intelligence: he is called pretty to make him a coxcomb; named good till he becomes a hypocrite; and learns to act the tyrant by ſeeing every perſon afraid to diſoblige him. Every thing within his view is calculated to prompt his deſires and provoke his paſſions; no antidote is oppoſed to ſuppreſs the one or to moderate the other: and he finds example every where at variance with precept. If he is born the ſon of a rich man, he is ſtill more unfortunate; as he will be careſſed by more ſycophants, and expoſed to greater temptations: and to be born a prince, is to be the moſt unfortunate of mankind.

The more complicated and various the pleaſures and buſineſs, which man is to purſue in life, he will be the more liable to defeat and diſappointment: and the more ardent his paſſions, they will the ſooner terminate in exhauſtion and diſguſt. The buſy ſcene,

therefore, leads quickeſt to ſatiety: the retired circle preſerves the longeſt enjoyment. So that thouſands of human beings walk the round of gaiety and diſſipation, for the certain reward of nervous debility. It is only at a particular ſtage of refinement, that theſe diſeaſes receive their birth: and when they exceed the ſum of other diſorders in a nation, they afford ſure tokens, that that people is paſſing faſt into dotage, and even under apparent proſperity verging to decline. They multiply in prodigious proportion: for beſides the *hereditary* prediſpoſition which taints the offspring, they are daily gaining ground from *acquired* infirmities. When we thus contemplate with a philoſophic eye, the riſe and progreſs of a nation, we obſerve a kind of phyſical neceſſity for the regeneration of mankind. A people, poliſhed and improved to the utmoſt, cannot remain long ſtationary; it muſt degenerate in body and mind. It muſt fall into ſlavery under ſome powerful invader; or ſink by ſome convulſion of nature; and with all the arts and elegancies of life, return to the barbariſm of its aborigines. Such a change of condition brings man back to paſtoral and agricultural habits; by which

his ſinews will be newly ſtrung, and his vigor of body renovated. And with theſe acquiſitions of corporeal reproduction, the faculties of mind in a latent ſtate, will accumulate thoſe powers and excellencies, that in a future period, will exalt human nature to civilized perfection; though ſtill to be expoſed in its turn to a ſimilar decline.

Although much ſtreſs has been laid on the imperfect ſtate of the digeſtive and aſſimilating powers in theſe diſeaſes, yet we often find a conſiderable degree of obeſity preſent, where the ſymptoms of indigeſtion prevail. But obeſity is ſeldom a proof of ſtrength; perhaps it oftener accompanies weakneſs: and the indolent inactive life ſo often led by nervous people, muſt favour the depoſition of fat. A ſpare thin habit, is however a more frequent attendant on dyſpeptic conſtitutions. The food may not only be badly prepared in the ſtomach, or vitiated by imperfect bile and pancreatic juice; the lacteals and meſenteric glands muſt alſo be diſeaſed, ſometimes impermiable, and perhaps ulcerated. The quick evolution of acidity, in ſome of theſe caſes, is ſurprizing; it is no ſooner corrected by alkalies or carbonate of lime, than freſh quantities are

felt. There is even reaſon to believe that ſome of the inteſtinal ſecretions are ſo depraved at times, as to become acid immediately, the accumulation is ſo rapid. The ſimple deficiency of bile cannot account for this, unleſs the bile alſo loſes its alkaline properties, which I rather ſuſpect it does in part.

Acidity is not always accompanied with flatulence. The laſt ſymptom is peculiar to ſome conſtitutions; and it is moſt troubleſome where ſedentary habits are carried to exceſs, as in ſome females. The uncommon quantity of air ſometimes extricated in the proceſs of digeſtion, would make us ſuſpect a large proportion of the food or water to undergo chemical decompoſition. Some activ eexerciſe or quick agitation of the body affords the moſt certain relief. The frequent micturition, and ſtrangury, which attend nervous indigeſtion, prevail moſt when the ſtomach is loaded with acidity, and this points out the method of cure. I have not made any experiments on the urine in theſe caſes; but it is likely, that the *uric acid* muſt appear in large proportion at that time.

All derangements of the uterine ſyſtem exemplify in the moſt ſtriking manner the ſtrong

ſympathy between the chylopoietic viſcera, and theſe organs. This is obſerved particularly at the age of puberty; at the *period;* at the beginning of pregnancy;* in the puerperal ſtate; in ſuckling the infant too long; at the change of life; in all conditions that affect the paſſions; and more or leſs in every complaint to which the female may be expoſed. It muſt therefore be of great importance in

* Many of my contemporaries at Edinburgh will recollect a caſe mentioned by Dr Cullen, in his lectures on the practice of phyſic, that ſtrongly proves the power of aſſociation during geſtation. A lady in a hopeful way, found it neceſſary to have her robe made eaſier, and ſent for her mantua-maker. But in ſtanding up to be meaſured, ſhe grew ſo ſick, that it was accompliſhed with great difficulty. The gown was brought home; and in attempting to try it on, the lady became ſo ſqueamiſh, that the mantua-maker was obliged to deſiſt, and leave her work to another time. A few days afterwards, another attempt was made to try it on; but now the very ſight of the gown brought on ſickneſs. It was determined to take the gown away, and to hang it up in a dark cloſet, not to be ſeen. Even this precaution did not avail; the lady could not look at the cloſet, or paſs near it, without feeling immediate ſickneſs. It was therefore carried out of the houſe: and this extraordinary aſſociation remained till the lady got her bed.

practice, that the phyſician ſhould inform himſelf well, with reſpect to prediſpoſition and temperament. We thus ſee on what irrational grounds the uſe of a claſs of medicines called *emenagogues*, was founded; and how neceſſary it muſt be in uterine obſtructions, to attend to the influence of that chain of ſympathies on which they chiefly depend.

How far the claſs of nervous diſeaſes is connected with gout, may, perhaps, require much future experience to determine. But as far as the inflammatory ſymptoms are not concerned, the two affections appear to be the ſame. They both depend on hereditary or acquired prediſpoſition: the cauſes which produce them are entirely alike: theſe are chiefly luxurious habits and the debilitating pleaſures: all the dyſpeptic ailments of the nervous frame, appear in the arthritic conſtitution. Every derangement of the biliary ſecretions, partakes in each, of a ſimilar diſpoſition; the ſtate of the inteſtinal canal is ſubject to the like capricious viciſſitudes in both; and alſo the urinary organs. The irritable feelings, and hallucinations of mind, with which both ſubjects are affected, have an exact reſemblance. And we obſerve, that the prevention

and treatment of nervous indiſpoſition and gout, are to be conducted on the ſame principles.

No fact in medicine appears more clear, than that the female of every gouty family, inherits in a high degree, the nervous temperament; and is liable from the general cauſes mentioned before, to ſuffer all the infirmities to which that temperament paves the way. This is exemplified by the exhibition of mercury and antimony; in the uſe of narcotics, particularly tea, opium, and vinous ſpirit; in every improper indulgence in food or drink, and in the government of the paſſions.

Gouty conſtitutions are known to be particularly liable to urinary calculi. The *uric acid*, which has been found to form ſo large a portion of theſe concretions, is moſt likely evolved during the depraved digeſtion and aſſimilation of the nouriſhment; and afterwards ſeparated by the kidneys, and lodged there, or in the bladder. It would be worth while to make experiments on the morbid acidity of a dyſpeptic ſtomach, for there is great reaſon to think that it does not differ eſſentially from the uric acid. All the alkalis are given with advantage in theſe kinds of urinary calculi;

and it is fair to allow their chief effect to be in correcting the acid in the firſt paſſages. *

From what has been ſaid, I ſhall hope to be juſtified in not attempting to divide theſe diſeaſes into genera and ſpecies, which have little foundation in nature, and are of no utility in a practical view. Combined in the definition of NERVOUS TEMPERAMENT, they bear a near analogy and connection to one another. We thus obſerve, the perſon who in youth poſſeſſes a mobile condition of nervous ſyſtem, with a temper of mind depending on that, making him fickle, volatile, paſſionate, will in the advance of life, be leſs irritable; but will ſtill preſerve ſo many traits of original character of habit, as ſtill to juſtify the term. The dyſpeptic infirmities will alſo undergo modification, in proportion to the manner of living and moral habits. Hence melancholy and hypochondriaciſm ſeldom appear before the meridian, but more commonly not till later in life.

On the whole then, it is fair to conclude, that the *pathology* of theſe diſeaſes is to be ſought in the *deranged ſenſations, and inverted*

* See the French chemiſts on this ſubject.

ſympathies of the GREAT SYMPATHETIC NERVE; and in the *irregular action* of all thoſe organs to which it is diſtributed. The cauſes therefore, whether *moral or phyſical*, exert their influence on this portion of the nervous ſyſtem; whoſe office directs the moſt important operations in the animal economy, and binds together in one great circle of feeling, actions and motions both diſtant and oppoſite. Hence a concourſe of ſymptoms of the moſt extraordinary kind, that invert the uſual functions of ſo many viſcera; ſuſpend their powers, or give to them new movements: by which means a train of falſe perceptions occupies the mind; and ideas the moſt monſtrous and incongruous, ſupplant for a while, all rational thought. In this reciprocal action between body and mind, in whatever part of the circle diſeaſe commences, it is quickly communicated to all the others. For as bowel complaints ſpeedily affect the mind and depreſs the ſpirits; ſo all violent emotions, in their turn, induce affections of the chylopoietic viſcera, and raiſe ſuch commotion throughout the ſenſitive ſyſtem, as to beſtow the nervous character on theſe diſeaſes.

CHAPTER VII.

Prevention and treatment.

In giving a title to this chapter, I have been cautious in holding out too much confidence in medicine. The word *cure*, implies a certain and perfect recovery, without danger of the diſeaſe returning, a circumſtance very doubtful here. But according to what is meant by *treatment*, I only lay down rules to regulate the practice, ſo far as experience has approved. This has been the conduct uſually obſerved with my own patients: and as ſo much depends on their own diſcretion, it puts them on their guard, and reminds them how far they are to calculate on permanent health.

It has been unfortunate for the medical profeſſion, as well as patients themſelves, that perſons labouring under nervous diſorders, have too much expected from the preſcription of the phyſician, and the ſhop of the apothecary, what is only to be obtained from their own caution and circumſpection. We thus

find moſt of them ready, and greedy to ſwallow every medicine that is recommended; but ſtubborn and untractable in all that relates to breaking in upon eſtabliſhed habits and cuſtoms; whether of luxurious living, depraved appetites, indolence of body or mind, or vicious indulgence of any kind inconſiſtent with health. Many of theſe habits, it is true, are ſo far interwoven with the conſtitution, as to make ſome changes almoſt impracticable: but as indiſpoſition is ſo frequently brought on, or aggravated, by the improper conduct of the patients themſelves, the phyſician cannot be too much on his guard, in demonſtrating to them all that belongs to their own government and demeanor. The medical adviſer, therefore, who obſerves the moſt diſintereſtedneſs towards his friends, will often be the firſt man to be diſmiſſed; while the ſelfiſh diſſembler, however ignorant, will become a favourite, and engroſs the emolument. On ſuch an occaſion, the virtuous mind of a liberal phyſician, will know where to look for approbation.

This branch of medical practice has commonly been reckoned one of the moſt lucrative; for the ſubjects of it are generally found among the affluent: they are alſo ſeldom with-

out ſome complaint that requires aſſiſtance; and they meaſure their comforts too often, by the quantity of medicine that is ſerved up. Nervous people are, moreover, endued with acute feelings; liable to act from the firſt impreſſion and impulſe, and eaſily deceived by the deſigning and intereſted. And ſhould they fall into the hands of a goſſiping phyſician, or a wheedling apothecary, theſe perſonages become a kind of appendage to their eſtabliſhment, if not fixtures in their houſes. Being ſingular in the ſelection of friends, they ſeldom mix in company; ſedentary from habit, they go little abroad; their amuſements and recreations are thus limited, and ſuch as poſſeſs the talent of bringing news, and telling a ſtory, are at all times welcome gueſts. But as the tale of their own complaints engroſſes ſo much of their converſation, a medical goſſip, before all others, is the moſt acceptable. Nevertheleſs, let the nervous and valetudinary beware how they truſt their health and their purſe in ſuch hands.

The *prevention* of all diſeaſes depends on a knowledge of their remote cauſes.

If in the former part of this inquiry, it has been found neceſſary to contraſt the health of

the ſavage ſtate with that of the civilized condition of mankind, for the purpoſe of tracing cauſes from their origin, it does not follow, in preſcribing regulations to the nervous and infirm, that we are to imitate the robuſt exerciſes of the barbarian, for the ſake of ſtrengthening the body, or to yield up the refinements of education and poliſhed ſociety, in order to ſubdue ſenſibility of mind. The leſſon is only ſo far in point, as it tends to confirm general truths by an appeal to facts, or to illuſtrate a precept by ſhowing an example.

In the preſent diſeaſes, according to the hiſtory given, we admit a *prediſpoſition* of body, without which, it is probable, they never appear. This *prediſpoſition* may be either *hereditary* or *acquired*; to both we give the name of *nervous temperament*. What therefore relates to correcting and preventing prediſpoſition, muſt begin with the earlieſt ſtages of infancy, and includes the whole rules of nurſing and rearing children.

Man is ſo much the creature of habit and imitation, particularly with what belongs to his *food*, *air*, *exerciſe*, *and cloathing*, that he may be moulded into any form we pleaſe. Nature has wiſely provided milk for the in-

fant, as beſt adapted to the delicate digeſtive organs and weak frame of early exiſtence. This kind of food ought to be continued as long as it is capable of giving due ſupport to the body. The mother, if poſſible, ought to ſuckle the child till it is nine months old; when cow's milk may be ſubſtituted. And it is worthy of remark, that the fodder of the cow very much affects the milk, ſuch as *grains and turnips*, ſo much in uſe near great towns. The firſt article makes the milk diſpoſed to aceſcency; and the turnips impregnate it with a diſagreeable flavour, which comes from an oil in the tops and rind. Such qualities are hurtful to the ſtomachs of infants: and graſs and hay are the natural food of this uſeful animal.

A child that is to be brought up by the *pan and ſpoon*, as it is called, it is obvious, ought to have the milk in the beſt perfection. This is a practice which I am ſorry to obſerve is ſometimes too lightly given into, in families. I have weighed its merits fully, in rearing my only child in this way, to fulfil the laſt wiſhes of an affectionate mother. But, though my darling boy has ſurmounted his loſs with the beſt poſſible health, I would not recommend this

mode of nurſing, on any terms, if it can be avoided. Nothing can compenſate to the infant for the want of the breaſt. About the third month, a little pounded biſcuit, previously ſoftened with a little boiling water, may be added to give the milk conſiſtence: and from the beginning, as much brown ſugar may be mixed, as to give it the ſweetneſs of mother's milk. Sugar, it ought to be remembered, is a bad ingredient in the diet of infants.

The infant may be confined to milk for the firſt year; when a meſs of chicken, veal, or mutton broth, may be given once a day, taking care to add nothing of the aromatic kind. However if the infant is much haraſſed with acidity, animal broth, ſuch as gravy ſoups, are not only the beſt ſubſtitutes, but the beſt medicine. After two years, the diet may be extended to a little ſolid animal food, ſome kinds of fiſh and eggs, but ſtill with a large proportion of milk. All paſtry muſt be carefully ſhunned: ſweetmeats of every ſort are hurtful: every *made diſh*, into which ſeaſonings and ſauces are put, ought to be avoided, as being a chief cauſe of ſtomach affections. All beers, ales, wines, and ſpirits, are excluded from this anti-dyſpeptic regimen. Pud-

dings made of rice, or light bread, may be allowed; but thoſe of unfermented flour, have all the diſadvantages of paſtry. Cheeſe is groſs food for children: and butter ſhould be ſparingly uſed. Vegetables may be eaten with animal food; the child being allowed ſufficient exerciſe out of doors, will always find them eaſy of digeſtion. The object to be kept in view, in recommending for infancy and childhood, a diet ſufficiently nouriſhing and eaſy of digeſtion, but at the ſame time, mild and bland, is, that the appetite may become accuſtomed to no high-ſeaſoned or luſcious diſhes; or the ſtomach inured to any hot or ſtimulating article.

Were theſe rules ſtrictly attended to in families ſubject to gout and nervous diſeaſes, many ſcenes of miſery and affliction might be prevented. It is a fact, to be daily obſerved, that the offſprings of theſe families, are, of all mankind, the moſt liable to fall into habitual drunkenneſs, and the love of luxurious feaſting. Their feelings and ſenſations are of that acute kind, that they eaſily receive the impreſſion of ſtimulating articles, and are quickly ſuſceptible of the pleaſure of taking them down.

Tea and coffee are excluded from this diet, as poſſeſſing a narcotic quality: milk is the beſt breakfaſt, but thoſe who may incline for more variety, may uſe cocoa. Cocoa is a mild, wholeſome, nutritive food, and after a little perſeverance, very grateful to moſt people, and eaſy of digeſtion.

From what has been juſt delivered on the diet moſt proper for infants and children, grown-up perſons will ſee reaſons, why they ſhould prefer a ſimilar conduct in the choice of their food. This is indeed a ſerious evil with moſt nervous and bilious people: they commonly indulge in high ſeaſoned diſhes, and uſe great quantities of hot ſauces or peppers, for the purpoſe, it is thought, of overcoming the flatulent propenſity of their ſtomachs. I have before condemned this cuſtom: where flatulence prevails, the ſtomach ſhould ſelect plain fare, and that in ſmall quantity; and after a ſhort reſt take ſome active exerciſe, which will afford certain relief.

The value of *air and exerciſe* to health, is amply pointed out in the preceding parts of this work: attention to them ought to begin with early infancy. The child muſt be exer-

ciſed in the open air, that is ever to attain due ſtrength or ſtability of frame. The moſt ſpacious and well ventilated room cannot ſupply the want of the external atmoſphere. A degree of vigor and fortitude of mind is inſenſibly acquired by being expoſed to the weather; while liſtleſſneſs and depreſſion of ſpirits as conſtantly follow confinement within doors. Much of this mental exhiliration muſt be derived from the objects which refreſh the eyes. The ſedentary life falls more to the lot of the girl than the boy, and is too often encouraged by thoſe prepoſterous modes of education to which young females are expoſed; but certainly a ſedentary life may be conſidered as the chief cauſe of female ill-health. I have heard a mother boaſt of her daughter being attended by *five* maſters, in different branches of education, in the day, beſides her taſk in the boarding ſchool. What human body or mind, at the age of fifteen, is equal to ſuch a trammel of ſtudy? Let the diſcerning mother, therefore, reflect in time, on the magnitude of the fault, if ſhe beſtows her daughter with a ſickly conſtitution as a dower, on her huſband. Can any evil in this world be worſe than conſtant bad health? How melancholy is the

ſtate of a family that is daily beſet by an attending phyſician and apothecary; continually ſerved with medicine; and a large proportion of income annually conſumed in ſupport of its phyſical retinue!

Among children deſcended of nervous and bilious parents, it is a caution worthy of every well informed phyſician, to be guarded in the uſe of emetics, purgatives, opiates, and worm medicines. The laſt articles require particular animadverſion. The fathers and mothers of ſuch families, have too often been in the habit of uſing medical preſcriptions on every ſlight occaſion; and very naturally think a ſimilar practice neceſſary for the health of their children. *Worms* can only be conſidered as the conſequence of a weak condition of bowels; ſo that their prevention and cure in children, muſt turn on ſtrengthening the viſcera, and expelling the vermin. A briſk purgative is commonly employed for diſlodging worms, and calomel has been the chief ingredient. But calomel ought never to be given alone; it is beſt to join it with jalap or rhubarb; though theſe articles by themſelves are ſufficiently powerful. I uſually give mag. uſt. with the jalap or rhubarb, with a view to the

dyſpeptic ſtate of ſtomach; and follow this purge with gentle doſes of bark, colomba, or any other ſuitable bitter. Nothing anſwers better than the ſem. ſanton. or common wormſeed. With all theſe I combine magnes. uſt. or cret. prepar, as the bowels happen to be ſlow or quick. Some chalybeate, ſuch as the red oxide, carbonas ferri, or lematura, may alſo be advantageouſly added. When theſe have been taken for eight or ten days, the briſk purge may be repeated. This plan may be continued for two or three weeks at a time: it will invigorate the digeſtive powers, and the general habit: and while it enables the bowels to expel the worms, it will prevent their generation, by removing the cauſe. Nothing can be more cruel than forcing the bowels of children by draſtic purgatives, to evacuate worms: the moſt active will ſometimes fail in doing this; whereas the invigorating method is ſure and ſafe, and cures radically.

What other precautions are neceſſary for the health of children, will appear ſufficiently plain from what has been ſaid on the cauſes of theſe diſeaſes. Theſe cauſes muſt be avoided, to inſure ſucceſs. The inhabitants of towns

ought if poſſible, to place their children in the country for the benefit of education. It is not merely the pure air, and ſpace for recreation and exerciſe, that a country ſituation affords, which make it preferable; other conſiderations of equal weight, are to be taken into the account. The habits which we are now combating, are the vices of artificial life. And the love of nature is one of the beſt leſſons to a young ſcholar; it checks every exceſs, and preſcribes nothing unwholeſome to either body or mind. To ſee the graſs ſpring, the plant ſhoot, and the flower bloſſom, are among the fineſt objects for contemplation. What ingenuous youth ever heard the bird ſing, the lamb bleat, or the heifer low, but warmed with emotions of a ſuperior kind. The beauties of landſcape, more than any thing we view, purify the heart, refine the taſte, and warm the feelings. All is chearful, active, and heathful, becauſe all is natural and innocent. Youth is the ſeaſon of life, to learn with advantage the value of nature's productions, and pictureſque ſcenery. If neglected then, the ſoil will groan under leſs amiable productions. To what an unfortunate change the preſent faſhions are conform-

ing mankind. The country houſes of our nobility and gentry are empty till July. Thus the ſpring months, that ſeaſon of joy throughout creation, paſſes unobſerved by the affluent and gay. The ſouls of human beings in this age of art, would ſeem to wiſh the ſun to be darkened; they find no pleaſure but in the light of a lamp or a flambeau. I feel for the riſing generation, when I conſider the effects of theſe overgrown follies upon unexperienced minds.

With reſpect to the *prevention* of theſe diſeaſes in grown-up people, or what is the ſame thing, correcting the *prediſpoſition*, no taſk in medicine has more difficulties to ſurmount. It is not that it is impracticable; but the patients themſelves are ſeldom willing to ſubmit to a code of rules for the direction of their health, and view with jealouſy and pain every precept that is to ſubtract from their pleaſures. What reward can encourage the ſlothful to activity? Who can teach the voracious glutton moderation in eating? Or what eloquence can perſuade the habitual inebriate to forſake his bottle? Nay how difficult the taſk, to draw the nervous female from her tea!

Where the *prediſpoſition* is not hereditary,

ſome of the cauſes which have been aſſigned, will generally be found to have brought it on. If theſe cauſes have been owing to any indiſcretion of the patients themſelves, to counteract them will be difficult in proportion to their inveteracy; and the deſires and paſſions which give them effect. A habit is to break up, without which there are no hopes of relief. Every nervous perſon has ſome favourite pleaſure to indulge. Articles of *materia medica* avail little, unleſs the patient forms the reſolution to obey the injunctions of his phyſician. To begin new modes of living; to go to bed ſoon and riſe early; to drink water inſtead of wine; to labour and toil, and be expoſed to the weather after years ſpent in luxury and ſloth, are changes not likely to be heard with ſatisfaction, far leſs to be practiſed with perſeverance, by an enervated voluptuary. Yet changes equally great muſt be effected, or there can be no recovery.

The treatment of theſe diſeaſes is a part of the phyſician's duty, that differs much from the experience neceſſary to direct with ſucceſs, the practice in moſt other diſtempers. For, however well he may be informed by preparatory ſtudies, and however ſtored with the re-

ſources of his profeſſion, ſomething will ſtill be wanting to inſure a deciſive method of cure, which even the ſick-bed cannot ſupply. This is the knowledge of character and of mankind, which can only be learned by quick diſcrimination, and correct obſervations formed in the buſy world. The living man, ſeen in his varied purſuits, can alone beſtow that knowledge on the phyſician. For this very reaſon, there are no diſorders that ſo puzzle and confound the young and inexperienced; and none ſo liable to be miſunderſtood by the ignorant, or plodding part of the profeſſion.

The old maxim *contraria contrariis medenter*, is better exemplified here, than in moſt other diſeaſes. To change a ſtate of body induced by long cuſtoms of living, or derived from nature itſelf, muſt be entered upon with fortitude and reſolution. But even where no improper habits have been formed, changes and variations of regimen that powerfully impreſs the nervous ſyſtem, and call forth active paſſions of a different kind, will often be neceſſary to health. To the inhabitant of a town, a country life will offer many new objects to the ſenſe, and afford the moſt ſalutary recreations. But that this change of ſcene

ſhould operate with due force on the ſentient part, it is not that a few weeks or months ſhould be paſſed in a new ſituation; if it can poſſibly be done, it ought to be for years; nay, in ſome inſtances it muſt be continued for life. And when ſuch tranſitions of living are entered upon, whoever intends to practiſe them, muſt duly weigh the circumſtances. The mind muſt not be left in a ſtate of inaction, leſt it ſhould relapſe into its old feelings, and become the prey of former paſſions. In making this tranſition from the city to the village, every perſon muſt be ſatisfied firſt, that he can employ his retirement without *ennui*, and paſs his time to advantage. The buſineſs of a farm is the natural avocation of a country life. Agriculture in the preſent day is improved to the form of a ſcience, and requires a regular courſe of ſtudy from the books which contain it; and when combined with the practical part, it becomes a ſource of profitable and elegant purſuit. Every ſeaſon brings with it ſomething to be done; ſo that a mind diſpoſed to be active, cannot want a motive: and the ſports of hunting, fowling, and fiſhing, will amply vary the hours which are devoted to relaxation.

The ſmall circle of domeſtic duties, which many perſons have to go through, exhibits ſuch a ſameneſs, that no recreation can be derived from it; there is ſo little of variety, that the mind as well as the body, dwindles into a tenor of liſtleſs inactivity. Sufficient ſtimulus is wanting to rouſe the languid faculties: and in ſuch ſituations we meet with the moſt confirmed habits of nervous affection. I once knew a lady, who for twenty years was never out of her room: at length, without any known cauſe, ſhe ventured abroad, and returned to the full exerciſe of all her former duties of friendſhip and family affairs. Such caſes are chiefly to be ſeen among people enjoying eaſy fortunes, who had been formerly active, but are now without any of thoſe urgent motives which preſerve energy of mind, ſo conducive to health. The public funds of this country are one great cauſe of thoſe torpid habits of living; where the ſecurity of property is ſo compleat, that any care about its ſafety is needleſs. A vaſt capital is by this means unproductive of any thing to the public, but is a ſource of bad health to its owner. All interprize is thus checked among a large part of the community, who become victims to diſ-

eaſed feelings, and to thoſe kindred glooms which prey on ſtill life. I have known ſome benevolent ladies of fortune, who, having no buſy employment to fill up their time, took under their protection ſeveral large families of children, among their poor neighbours; and by adminiſtering to their wants, directing their education, and diſpenſing cordials, medicines, and neceſſaries to the ſick, made themſelves a bleſſing to ſociety: and by the air, exerciſe, and recreation, which were required for the diſcharge of theſe good offices, they warded off all the unpleaſant attacks of a delicate frame, and a nervous conſtitution.

To the man of buſineſs and the artiſan, who are neceſſarily confined to a town, I would recommend, that as much time as poſſible, in their leiſure hours, ſhould be ſpent out of doors, in riding or rambling about the outſkirts of their reſidence. This kind of exerciſe ought to be carried to a much greater length than has uſually been adviſed; it ought to be continued to the breaking out of a free ſweat. Theſe perſons muſt learn to brave the weather, and ſally out in purſuit of their health and recreation, in deſpite of wind and rain: and their dreſs may at a cheap rate, be

accommodated to the ſtate of the atmoſphere and ſeaſon. The diſtance from town, which may be neceſſary for theſe excurſions, muſt be meaſured by the purity of the air, and the ruſticity of the country: they muſt get beyond the effluvium of ſmoke and mud.

When employed at the deſk, men of buſineſs, and indeed all perſons who write or read much, ought to uſe a ſtanding poſture, to prevent the body from being bent, by which means the lungs and ſtomach, as well as the whole abdominal viſcera, will be free from compreſſion. Want of exerciſe at all times impedes the free circulation of the blood, and the regular functions of the different bowels; but compreſſion of theſe organs, whether by tight lacing and ſwaddling, or by any unnatural poſture long continued, has ſtill more pernicious effects. A ſitting poſture is alſo extremely hurtful to the urinary paſſages, and favors the depoſition of matter that brings on the diſeaſe called the ſtone.

Exerciſe and recreation, of the kinds juſt mentioned, unfortunately cannot be employed by the town-bred female. Indeed the faſhion of a town life, at this day, almoſt excludes the lady from every ſhare of healthful exerciſe;

for it is not to be expected, that the fair ſex can, by themſelves, frequent the public walks, or perambulate the adjoining fields, to breathe a purer atmoſphere. In this age of manufacture, trade and politics, the morning hours of the gentleman are commonly ſpent at the counting-houſe, the exchange, or the coffee-houſe; ſo that the ladies muſt be ſatisfied with a ſhort viſit of their male companions at the dinner table, which ſeems almoſt the only ſcene of intercourſe between the ſexes. In what manner then is the city lady to preſerve health, or regain it when loſt? If ſhe cannot look to a country reſidence, her ſituation muſt be pitiable.

As theſe diſeaſes, from innate delicacy of frame, fall moſtly on the fair ſex, how cautious ought parents to be in ſelecting proper ſeminaries of education for their daughters. Many fathers and mothers, I believe, ſtill prefer a *boarding ſchool* tuition, to private inſtruction under their own eye. But I am here to ſpeak chiefly, as it concerns the health of young ladies. Girls are commonly ſent to

theſe houſes, at a period of life when the conſtitution is to undergo ſome material changes, which require the moſt attentive and delicate treatment. Now it ſo happens, that many of theſe boarding houſes lodge thirty, forty, fifty, nay an hundred young ladies. I am at a loſs to conceive how any miſtreſs of a ſchool can do juſtice to ſo large a ſeminary of pupils. But I may be told, aſſiſtants are kept in proportion to the number of ſcholars. This is evading the queſtion, not anſwering it: aſſiſtant teachers may anſwer all the purpoſes of ſchool hours; but do all theſe aſſiſtants poſſeſs the qualifications neceſſary for forming young minds to be amiable wives, affectionate mothers, and accompliſhed women? Scarcely. A miſtreſs of education is in the place of a parent: is this maternal duty then of ſo ſmall importance that it admits of being deputed to the third degree? They muſt have cold hearts who think ſo. Every diſcerning mother knows well, that the ſmaller her family is, ſhe can the better attend to the wants of her children. How then can a miſtreſs of a boarding houſe, who officiates for a livelihood only, do more than the natural guardian? The mere acquirements of learn-

ing are a ſmall part of female education; it is the domeſtic virtues, and the retiring graces, which form the chief excellencies of woman. Which of theſe faſhionable ſchools have given proofs to the world, that theſe are the ſtudies they inculcated; and that their matrons are models for imitation, beyond the generality of mothers?

In this country, it is little more than a century, that daughters were thought worthy of an improved education. So lately have we emerged from barbariſm. Ever bleſſed be the memory of the amiable Mr Addiſon for this poliſh to ſociety! It has not therefore yet crept into our cuſtoms, to honour female inſtruction with thoſe marks of authority which diſtinguiſh public ſchools for boys. Preceptors bearing academic degrees, and licenſed by the learned, are alone truſted to conduct the education of young men. Whereas, any lady of tolerable mediocrity in talents and accompliſhments, who can meet with the countenance and ſupport of a few well-meaning friends in her neighbourhood, is deemed equal to direct a boarding ſchool for young girls. Books may be multiplied without number on female manners, if ſome check cannot be given to the cuſ-

tom of allowing their education to be conducted by improper perſons. One vicious ſeminary will do more harm than can be compenſated by the whole philoſophers of the age. Hence the neceſſity of qualifying the mother to inſtruct her own children.

In a public boarding ſchool there is a very heterogeneous concourſe of characters. We there behold the daughters of perſons of all ranks in life; of families of the moſt diſcordant habits and ſentiments; many of theſe bringing abroad all the prejudices of kindred; and perhaps not a few labouring under hereditary diſeaſes, or imbecility of mind: all lodged, boarded and trained, under one roof. If imitation is one of the ſtrongeſt propenſities of our nature, is there not great hazard in ſuch a collection of young people? Every good mothor is cautious whom her daughters chuſe as companions at home; and can ſhe be leſs jealous of their ſafety when abroad? The beſt and worſt of our habits receive a tincture of our aſſociates, but particularly during youth. Such a ſchool of young girls, all differing in rank, in fortune, in temper, in conſtitution, in paſſions, and in proſpects in life, but liable to communicate follies, propenſities and diſeaſes,

to one another, muſt be conſidered as an improper aſſemblage.

All boarding ſchools ought to be ſituated in the country; not only for the ſake of air and exerciſe, but that the young ladies may be cut off from goſſiping viſitors. This will tend to ſecure health, by rendering the introduction of contagious diſeaſes more difficult. Such a ſpace of ground ought to be laid open as may be ſufficient for amuſement and play; and certain portions of the day allotted for walking, or more active ſports, that thoſe who are moſt ſedentary may be forced to partake. An adjoining flower garden will be a motive for recreation to ſome, while the taſte may be improved by the ſtudy of Botany; a taſk peculiarly adapted to young ladies. Such avocations will train the female mind to the love of ſimplicity, and ſtore it with that ſpecies of information, which affords food for reflection at a future day; and will fill up much of the leiſure to be met with in the domeſtic ſcene*.

* The young ladies in boarding ſchools, in this vicinity, who are inſtructed to the love of the *animated world*, have now a rich field for contemplation in the elegant volumes of our townſman, Mr Bewick. A work that does credit, not only to this country, but to the age.

The pupil of elegant Nature will thus find a country walk as much the habit of life as her hours of ſleep; and will not be ſcared from it by a dirty road, or a lowering ſky: a portion of time will always be due to exerciſe, that the faculties may be refreſhed, and the eye feaſted by the beauties of creation. And while her nervous aunts are moping their evenings over the card table, ſhe will gather health by her cheerful excurſions; and preſerve her bloom of countenance by the only means that can give it an additional charm.—Theſe ideas may, by ſome, be deemed a little romantic; but when I look to the ſickly frame and miſerable exiſtence of a nervous patient, I can find an antidote againſt this ſpecies of criticiſm.

The diet of theſe ſchools, I am much afraid, is often exceptionable. And if their matrons are not too wiſe for advice, they will find many cautions neceſſary with girls, nervous in themſelves, and deſcended from nervous, bilious, and gouty parents. They will therefore find it of conſequence to pay ſome attention to the phyſical traits of their pupils, that they may learn how to preſerve health. Let them beware of encouraging hot, or highly

ſeaſoned diſhes. Tea and coffee ought to be excluded from their bill of fare. Plain dreſſed meat; plain puddings; no paſtry; no cake or ſweetmeats; water, or milk and water, with meals; fiſh with plain butter; no vinous liquors, but when preſcribed medically. A plentiful dairy, will be a moſt valuable appendage to every boarding ſchool: but above all let them inculcate and be the examples of early hours in riſing and going to bed.

I am one of thoſe who conſider the office of ſuperintending a female boarding ſchool, as a ſtation of great importance and reſponſibility: and officious friends ſhould not be too precipitate in recommending perſons to fill it. It appears to me of even greater moment than a teacher of boys, let their rank and conſequence be what they may. The boys whoſe education may have been neglected, by future attention may be recovered: but the young lady whoſe manners have once received a wrong bias, is ſeldom reſtored to a ſimple and unaffected demeanor; and ſo it is with health alſo. To married women only this buſineſs ſhould be aſſigned: and it ought to be given in preference, to one who has educated her own daughters. It will not be contended in oppo-

ſition to this opinion, that any one can be ſenſible of the mother's duties, who has not ſtood in that relation herſelf. A good temper and benevolent diſpoſitions muſt be eſſential ingredients in this character. Theſe animadverſions on female education and management cannot be called foreign to a treatiſe on nervous diſeaſes. They are the reſult of long obſervation, and of much converſation on the ſubject, in different parts of the world, with many ſenſible women, who had received a boarding ſchool inſtruction, and often lamented the imperfections to be found there.

Dr Beddoes in his Hygeia, has lately publiſhed ſome remarks on theſe inſtitutions, and given accounts truly frightful of their internal economy. The medical attendants of theſe ſeminaries have hitherto preſerved a ſilence, not always commendable, when improvements for the ſake of health appeared ſo neceſſary. It is fortunate for the progreſs of ſcience and the good of human kind, that ſuch men as Dr Beddoes now and then riſe up on the theatre of the world; who, above the low trammels that fetter ſelfiſh beings, dare to combat prejudice and error, and expoſe the ſtupidity of rejecting improvement. But the firſt ſtep to

a wholeſome reform in behalf of this moſt amiable part of creation, muſt be to limit the number of pupils. Parents have it in their power to effect this, by ſending their daughters to thoſe ſchools only, whoſe numbers never exceed a family circle.

When we recommend *air* and *exerciſe* to our patients, the nature of what advantage we expect from them ought to be explained, that the due effect may be obtained. A number of people are too apt to think, that a ſhort formal walk out of doors, at ſtated hours, is ſufficient for this purpoſe. Nay, there are hundreds who think they have done great things if they go abroad for an hour or two in a cloſe carriage. Such perſons may be very much pleaſed with medical admonitions; but they pay a poor compliment to their phyſician, when they limit his directions to ſuch forms. In a luxurious age, and in a country like England, wallowing in wealth, and rioting in indulgence, I am well aware how difficult and unthankful the taſk, to tell people they are doing wrong, when they receive ſo much pleaſure; and how hopeleſs the proſpect of bringing them back to ſimplicity of manners, and ſober modes of living, after unbounded gratifi-

cation. I muſt however contend, in the prevention of theſe diſeaſes as depending on prediſpoſition, that the exerciſe ought to be of the moſt active kind, even to labour and fatigue; and always till it produces a moiſt ſkin, if not a profuſe ſweat. As theſe reſolutions gain ground in the *nervous temperament*, the idle and trifling objections commonly made againſt ſeaſon and weather, will ſoon vaniſh. It is the certain effect of recreation out of doors, to exhilirate the mind, while it invigorates the body; which ſoon gives birth to new feelings, new ideas, and active faculties. To a perſon accuſtomed to a warm cloſe room, and ſeldom moving beyond the threſhold, I conceive the influence of the external air, and ſufficient geſtation at the ſame time, to be a conſiderable ſtep towards *a reverſed method of living*.

The value of *exerciſe on horſeback*, is ſo well known, that it may ſeem ſuperfluous to mention it here. But in the prevention and treatment of nervous and bilious diſeaſes, it is ſupereminent. When it is begun with confidence, care ſhould be taken the ride may not grow irkſome by being conſtantly over the ſame road. A journey ſhould therefore be frequently interpoſed; and ſome buſineſs to be tranſ-

acted, kept in view. The motion and action which are communicated by riding, to the organs of digeſtion and reſpiration, are of the moſt ſalutary kind. The ſtomach, by being duly compreſſed by the abdominal muſcles, has its contents, after being fully diſſolved by the gaſtric liquor, expelled at the proper time. Some perſons will tell you, that it is hurtful to uſe exerciſe after a full repaſt: but that is the language of a pampered being, and of one who eats beyond what nature requires: how otherwiſe could the labourer riſe to his work, with ſo ſhort a reſt after his dinner? But cuſtom has made it familiar to him, and he is ſatisfied with what will ſupport him. Were every lover of good eating compelled to walk a few miles immediately after dinner, he would ſoon learn moderation. By riding, the liver, with its ſluggiſh circulation, its gall-bladder and ducts, is well preſſed and agitated; ſo that the bile is ſecreted in proportion to the wants of the digeſtive proceſs, and all its canals kept pervious. The periſtaltic motion of the inteſtines is thus promoted with all the fluids; and the lacteals in like manner perform their office. The kidneys at the ſame time, as well as the bladder, diſcharge the urine to the laſt drop; and no par-

ticle of fabulous matter is detained in either cavity, to become the nucleus of a future ſtone, as ſo often follows a life of indolence and ſloth. The lungs being fully ſtretched and expanded, by the full inſpiration of a pure atmoſphere, the vivifying oxygen is taken in, in due quantity, to afford ſtrength and ſtimulus to the body, and activity to the intellectual faculties. Hence the heart is excited by the florid denſe blood to ſtrong contractions; and the ſurface and extremities warmed and ſoftened by a generous vital fluid; which, while it defends from a cold and fickle atmoſphere, keeps up a glowing perſpiration, to the certain relief of every dyſpeptic ſymptom. From theſe effects of equitation ariſe cheerful ſpirits, acute underſtanding, good appetite, perfect digeſtion, ſound and refreſhing ſleep, and all the healthful and pleaſurable ſenſations which flow from *mens ſana in corpore ſano.*

The *cold-bath* is a common remedy with weakly people; and it is often reſorted to by the nervous invalid. I rather wiſh to conſider it as an athletic exerciſe than a medicine, I therefore introduce it under the prevention. Modern phyſicians have, however, made greedy attempts to bring it under their con-

trol, and to point out how and when it ought to be uſed. But the rules which have been laid down for the practice, and the explanations which have been given of its mode of action, are alike unſatisfactory. In the recent publication of Dr Buchan, on cold and warm bathing, the ſubject is treated more ſcientifically; and his book ought to be carefully read by every perſon who reſorts to a watering place.

When we look at the ſubjects who flock to the ſea-ſide to uſe the *cold bath*, we find perſons of every deſcription, labouring under all the varieties of diſeaſe. It muſt therefore be either a univerſal remedy, or no remedy at all. Hence one ſpeaks of it as a *bracer*, and giving *tone* to the ſolids. Another accounts for the good effects of it, from the *ſhock* it gives: and a third explains it, by *accumulating* ſenſorial power, or excitability. Leaving all theſe gentlemen in full poſſeſſion of their theories, I muſt beg to conſider it chiefly as an exerciſe and amuſement. A degree of reſolution is required for the employment of cold bathing, which inſpires courage; for the time, it ſhifts the train of thought, and calls forth a conſiderable muſcular exertion. On

the ſudden immerſion of the body into the cold water, a quantity of heat is inſtantly given out, which gives what is called the *ſhock;* and the temperature of the body is for the time reduced, at leaſt ſo long as it remains in the water. In order therefore to render it a ſalutary exerciſe, the water muſt be of a temperature ſuited to the vigor of body, or its habit of bearing cold. We thus ſuppoſe that the ſeaſon for cold bathing is limited to the ſummer months; for in winter the degree of cold which we require, can be obtained from the atmoſphere. In the act of dreſſing and undreſſing, the body is expoſed naked to the air; I fancy this may be the means of hardening it a little to the weather, which is a good effect.

Perſons who are timid at firſt, if their fears decline as they go on, gain advantage from bathing. But thoſe who never ſurmount the dread, cannot expect benefit from it. Much of the good, it would appear, ariſes from the vigor and activity it calls forth. If the bather can ſwim, and uſe conſiderable exerciſe in the water, he may remain in it a length of time; but others cannot do this without danger of catarrh. After coming out, if the ſpirits are raiſed, the body agile, with a glowing warmth

ſpeedily ſucceeding on the ſkin, and fitneſs for muſcular motion, with increaſe of appetite, the bath has done good. When a perſon is extremely apprehenſive, he ought to begin bathing very gradually; lave the body firſt gently, then try deeper water, till at laſt he can bear a plunge. To remain long chilly, low ſpirited, and without appetite, are ſigns that the bath is hurtful. It muſt be cautiouſly tried by patients much reduced; and is moſt ſafe after convaleſcence, when the uſual health returns.

I am alſo of opinion, that thoſe viſits to watering places are highly beneficial to nervous people, by breaking in upon eſtabliſhed habits, that uniform tenor of life which they commonly lead; ſhaking off indolent cuſtoms, and forcing them into company and cheerful ſociety. They *are put out of their way*, as the vulgar expreſſion is; and this very change of diſcipline is a great ſtep to a cure: the more the etiquette, therefore, to be gone through, ſo much the better.

In this age of refinement, while ſo many indulgencies creep in upon our domeſtic arrangements, it is ſurprizing that baths do not become appendages to our houſes. They are never thought of till the phyſician orders

them for the recovery of health. Yet there appears nothing more likely to conduce to the comfort of a family than a ſuite of baths; to which all the members of it might daily repair.

Moderate exerciſe ought to be continued for ſome time after coming out of the bath, ſo as to promote the glow, and encourage perſpiration: and the beſt time for uſing it is between breakfaſt and dinner. Very weakly people may begin with 72° of Fahrenheit; and reduce it as they find occaſion, but it never ſhould be brought below 54° of that ſcale. The employment of the bath was a common ceremony with the ancient Romans; and though frequently ſpoken of by Celſus, it does not appear to have been much of a medical regimen: but the cleanlineſs and purification of body, which flow from it as an ablution, muſt be allowed to be a grand defence to health.

The *warm bath* is another remedy in nervous and dyſpeptic caſes. In that kind of debility which is marked by a languid circulation of the blood, and a dry ſurface; leſs mobility of nervous ſyſtem, or rather torpor of it; leſs prone to violent emotion, and ſubject to

coldneſs of the extremities, and general inactivity of muſcular power; in ſuch caſes the warm bath is often a certain remedy. It ought to be practiſed twice a day; after which the body muſt be kept warm by ſuch exerciſe as can be taken within doors; ſo that it may be gradually brought to the common atmoſphere. This glow may be aſſiſted by flannel cloathing. If the warm bath is tried in cold weather, the tranſitions ought not to be great at once, either before or after its uſe. A range of baths of different degrees of heat, would beſt anſwer this purpoſe; where the patient might begin with 84°. and aſcend to 110°. if neceſſary.

The warm bath is to be conſidered as a means for applying the ſtimulus of heat by immerſion, when it would be improper to derive it from the atmoſphere; which cannot well be done in our latitudes, without at the ſame time injuring its reſpirable quality. It is of eminent advantage in that harſh, impervious ſtate of the ſkin, which often accompanies weak digeſtion; where the ſtomach and bowels become torpid from ſympathy with the ſurface. No relief is obtained in ſuch caſes, if a free perſpiration does not follow: ſo liable

is dyſpepſia, and the ſuppreſſion of the cuticular diſcharge to alternate with one another. The ſoothing ſenſation which it gives, and ſerenity of mind which it inſpires, are the index of the good effects of the warm bath. But where theſe are not felt, and on the contrary an increaſe of dejection and weakneſs, they are proofs of its doing harm, and it muſt be given up. When the warm bath does not agree, it is ſurprizing to ſee how quickly it debilitates, ſo that it cannot be perſiſted in long with ſafety. I do not preſume to decide whether the natural thermal waters, ſuch as Bath and Buxton, or the water heated by artificial means, ought to have the preference. But it ought to be remembered, that a journey to and from theſe places of public reſort, muſt be advantageous to an invalid: and the change of ſcene, cheerful company, and gay amuſements, which they afford, cannot but be beneficial to the body and mind of a nervous patient.

When employed as a phyſician of his majeſty's fleet, I made many attempts to get our naval hoſpitals furniſhed with ſuites of baths: but all my applications were in vain. Few public infirmaries in England, though ſome of them are well ſupported, can boaſt of theſe

uſeful appendages. Yet cold lavation of the body muſt be allowed one of the beſt adjuvants to health.

Mineral waters are another form of water conveying medicinal powers to the body. They may be conſidered either under the prevention, or treatment of nervous diſeaſes. But they are more commonly uſed by the infirm and convaleſcent, than by thoſe labouring under ſevere diſeaſe: they will therefore be noticed with moſt propriety in this place. I ſhall have occaſion to ſpeak of ſome of their ingredients as medicines, under the treatment. There can be no doubt that the efficacy of *mineral waters* is very conſiderable in many caſes of indigeſtion, nervous debility, and thoſe variations of it, uſually called bilious. The *ferruginous*, or thoſe impregnated with iron, are the moſt valuable: and where this principle happens to be joined in the ſame water, with ſome ſalt of a purgative quality, as that of Cheltenham, in certain nervous and dyſpeptic habits they are peculiarly uſeful. Where occaſional icteritial ſymptoms prevail, from obſtruction of the biliary ducts, whether from ſpaſm, mucus, or other cauſes, which retard the periſtaltic motion of the inteſtines by the

bile being deficient, ſuch combinations of iron and purgative ſalt, have the beſt effects; as the laxative power of the one does not interrupt the invigorating quality of the other. Iron diſſolved in water by the chemiſtry of Nature, ſeems to act more powerfully by its extreme diffuſion: and as in this ſtate of ſolution, it is capable of circulating through the minuteſt veſſels, its ſtimulant and ſtrengthening powers are exerted on the remoteſt parts of the ſyſtem. Much of the operation of chalybeates may be by chemical union with the fluids of the body, but there can be little doubt that they alſo directly ſtimulate and excite the nervous ſubſtance. In thoſe perſons where cold extremities and pale complexion indicate a languid circulation and poor blood, beſides weak digeſtion, chalybeate waters often perform wonders. But where there is much colour on the ſurface, and a florid blood, I think them improper.

There are however many caſes of nervous indiſpoſition, for which the waters impregnated with the ſulphurated hydrogenous gas, and a neutral ſalt, are to be preferred: ſuch are thoſe of Harrogate and Moffat. Where cutaneous eruptions or defædations, are troubleſome, or

apt to alternate with the dyſpeptic and bilious ſymptoms, theſe hepatiſed or ſulphurous waters, ſeem the fitteſt. They may alſo, at the ſame time, be uſed as a warm bath; and their efficacy in this way is known to be conſiderable. Theſe cutaneous diſeaſes are probably much owing to the inactivity or torpor of the abſorbents, and perſpiratory veſſels on the ſurface of the body, over which this kind of water has a manifeſt ſtimulant power. I have often ſeen ſimilar good effects from a preſcription imitating the compoſition of theſe waters. *

But while I fully admit the medicinal effects of mineral waters in theſe diſeaſes, I muſt ſtill reſerve a ſhare of the credit, to the relaxation

* Since writing this paragraph, I have peruſed a very ſenſible pamphlet, by Mr Peacock, ſurgeon in Darlington, announcing the diſcovery of a *ſulphurous water*, at Dinſdale, in the county of Durham. This water, from the analyſis given, contains a very large proportion of *ſulphurated hydrogenous gas:* and its efficacy on the uſual complaints, for which this kind of water is employed, has been confirmed by many trials. This little work contains many able and pertinent remarks on cutaneous diſorders; and ſome ſtriking facts, on their alternating with nervous and ſtomach affections. MAY, 1806.

and amuſement that are to be met with at theſe healthy and faſhionable reſorts of company. Taken together, and properly employed, they form a moſt important part in our preventive practice. I know not what would become of numbers of families in this country, were it not for the enjoyment which is obtained, once in the year, at ſome popular watering place. The time of leaving home is wiſhed for with impatience; and the avocations and engagements which delight them abroad, make up the chief theme of converſation till the ſeaſon returns.

Nervous people ought to clothe rather warm, and guard againſt variable weather. If they are accuſtomed to flannel next the ſurface of the body, it muſt be often ſhifted: and the body ought to be wet-ſpunged, or ſprinkled with cold water every morning, then wiped dry with a hard towel. Perſons who practiſe this mode of lavation daily, know that cheerful ſpirits, an agreeable warmth, keen appetite, and eaſy digeſtion, ſucceed to it. And when through indolence or forgetfulneſs, they happen to leave it off, their dyſpeptic diſpoſition ſoon gains ground. The feet of ſome nervous people are very liable to be cold; but this oc-

curs moſtly with ſuch as uſe no exerciſe; for the ſitting poſture checks the circulation in the lower extremities, and alſo diſpoſes them to ſwell. Stockings made of lamb's wool, laced ſtockings, or at leaſt flannel ſocks, elaſtic gaiters, and hair or cork ſoles, make the proper defence in winter, for the heels and feet: and while they prevent chilblains in froſt, they inſure the pleaſure of recreation out of doors, when the ground is damp. But where one perſon receives an injury to health from damp ground and thick fogs, a thouſand periſh by loitering within doors to avoid them.

To ſuch of the nervous temperament, as complain much of head-ach and vertigo, in full habits, with frequent heat and coldneſs of the head, accompanied with drowſineſs and ſtupor; theſe ſymptoms in advanced life, are always to be dreaded. They particularly attack drunkards and great eaters, who are corpulent, have large heads and ſhort necks. Perſons of this deſcription muſt correct their modes of living, if they wiſh to avoid a ſudden death. Low diet, with entire abſtinence from ſpiritous and fermented liquors, and much active exerciſe, is the beſt regimen for health. Bleeding, cupping, and leeching the temples,

are ſometimes required: but theſe can only be conſidered as temporary remedies, for frequent blood-letting favours fulneſs of the veſſels. The ſtate of the bowels muſt be lax; the ſleeping room, airy and cool; ſuppers muſt be avoided; the ſleep ſhould not be long, and violent paſſions of the mind muſt be guarded againſt.

Where nervous diſeaſes have been brought on by *affections of the mind*, misfortunes in life, or affliction of any ſort, it is obvious they muſt be conſidered as partaking more of a mental diſorder. Change of ſcene in theſe caſes, is commonly the firſt ſtep to the cure: as by removing the diſtance of all objects that have a tendency to refreſh the memory, or cauſe aſſociation of ideas, that bring up gloomy reflections, you weaken the chain of ſympathy, till it is gradually broken. It is the duty of relations and others, who may be intimately acquainted with the patient, to inform the phyſician minutely of every circumſtance; for it muſt be in vain to preſcribe for a mental diſeaſe, where we are kept in the dark concerning the cauſe. Every ſuch caſe muſt have its appropriate management, both on the part of the medical attendant and inmates, Such

hallucinations of mind are always to be regarded as threatening infanity or idiotifm; and without a careful inveftigation of the antecedents, no phyfician can direct the treatment to advantage, or pronounce the iffue. It happens too often, that the early figns of mental difquietude, which difcover themfelves firft by peevifhnefs of temper, and irritable feelings, have been mifconftrued by relations: and a degree of harfhnefs fometimes has been exercifed upon the patient from a difbelief of his diforder, and not foreſeeing to what it was tending. The fubject in all refpects requires infinite addrefs on the part of the phyfician: for petulant meddlers are more difficult to be managed than the deranged patient. To treat this ftage of a ferious malady with doubts of its exiftence would be deliberate cruelty. To mock their fears, however falfe, befpeaks coldnefs of affection; and I have often feen it bring on intemperate fallies of rage: flattery anfwers better, for they have lefs jealoufy where there is no attempt at difputing they are right. But there are moral and phyfical caufes prompting thefe feelings, with an impulfe not to be refifted: and while the mind is occupied with fuch fenfations, it is in vain to perfuade the

patient that they have no reality. When people with low ſpirits are to be cheered and recruited by converſation, it ought always to be conducted with delicacy; and this can never be duly managed but by a perſon of intelligence. If the mind at any time is ruffled by neglect, when it expected ſympathy, we run the hazard of ſeeing the whole regimen of health given up, and all confidence of attendance loſt for ever. And when medicine is directed, every argument muſt be employed to inſpire hope of its virtues, and the certainty of its doing good. Here, as in maniacal caſes, ſubjection and reſtraint have been frequently carried too far; and the patients have been driven to deſpair, and ended their torments by ſuicide, rather than ſubmit to the laſh of their keepers. If inſanity is purely a mental alienation, the method of cure muſt turn chiefly on a mode of diſcipline addreſſed to the weakened powers of intellect. Such perſons ought never to be left alone; their train of thought ſhould be conſtantly interrupted; for by indulgence it acquires growth and retention. I do not ſee how corporal puniſhment can be admitted, where the reaſoning faculties have ceaſed to exerciſe their authority, and where

the living ſoul is not conſcious of moral obligation. A phyſician who has to direct the treatment of maniacs, muſt live among them, that he may learn the genius of every individual caſe, if his diſcipline is to conduce to their recovery.

There are certain forms and cuſtoms of living, practiſed by men who are commonly deemed *models of temperance.* The ſtriking part of a regular life, is an exact and correct diviſion of time. Every hour of the day has its appropriate taſk; and pleaſure and diſſipation never ſupplant buſineſs and duty. The temperate man goes to bed before a late hour, and uniformly riſes early. Hence early hours are another term for a regular and temperate mode of living: as the contrary beſpeaks a life of frivolity and inſignificance. Can any human being be in purſuit of noble and elevated honours, who is found in bed at eight or nine in the morning? Such a man never yet in the world, acquired the title of either good or great. It is therefore one of the moſt unpardonable neglects of a family, where parents give the example of late hours to their children. What an inſult to nature, to allow the ſun to ſhine ſix hours above the horizon, before getting up!

Late hours at night, and long in bed in the morning, are among the nurſing mothers of nervous complaints. A permanent and perfect cure is never to be accompliſhed, without forſaking theſe ſlothful habits: and to diſcard them is always a part of my diſcipline.

The *diet* of a temperate man, or ſuch as wiſh to be free from nervous and bilious complaints, is plain food, and that in moderate quantity. A perſon ought to riſe from table, cheerful, active, and refreſhed with what he has eaten; not oppreſſed, drowſy or unfit for motion. Where great quantities of ſtrong malt liquor, or wine, are taken with dinner, the ſtomach becomes the more overloaded; and ſleep is called for, to be relieved from the burthen, as an inſtinct of nature. An appetite not accuſtomed to high ſeaſoned diſhes, or ſavoury meat, ſelects for itſelf what is wholeſome and eaſy of digeſtion. Beef or mutton are better than veal or lamb; roaſted meat not overdone is preferable to boiled; but broths not too rich or ſuperſeaſoned with ſpices, ought to be a daily part of every temperate dinner. Nervous people complain of broths diſtending the ſtomach and occaſioning flatulence; but this is the language of ſloth;

motion and exercise soon correct this kind of uneasiness; and when the stomach has been accustomed to broths, no such effects can be perceived. The *legumina*, such as peas and beans, must be sparingly used at all times; they load the bowels and render them slow; and raw vegetables, as sallad and cucumber, are also improper. But pot vegetables in moderate quantity, are all mild and wholesome to be used with meat. Fish and poultry without rich sauces, may be allowed: and game on the same terms. All kinds of pastry and pye-crust are difficult of digestion, and prone to fermentation and acidity; they lie heavy on the stomach, according to the common phrase: and bread, rice, and custard puddings, are the only articles of that class that should be eaten. Sound biscuit, and light well fermented bread are to be used; leavened bread, or bread baked without yeast, in weak stomachs, produces acidity, heart-burn and flatulence. Cocoa or milk, forms the mildest fare for breakfast, which ought to be taken soon after rising. A very light meat supper is often necessary to amuse digestion: but gruels, sago, arrow-root, and such like, are improper, they run into fer-

mentation, and partake of the unfermented farinacea.

Water, or toaſt and water, is the beſt *drink* with meals; and milk and water at other times: cyder, perry, beer, and porter, create diſtention, flatulence and heartburn. The quantity of wine at, or after dinner, ſhould be ſmall, and that diluted with water: Madeira when genuine, is the pureſt wine, and beſt ſuited to a gouty or dyſpeptic ſtomach. Shrub, ſherbet, punch, and every thing into which an unfermented acid enters, are improper drinks: *liqueurs*, and *ſpirits* of every deſcription, are to be conſidered as Syrens, that charm the road to deſtruction, and ought to be rigidly abſtained from.

Nervous perſons do beſt to dine off a few diſhes; and thoſe of the ſimpleſt kind: two or three articles at moſt ſhould bound their repaſt. They are, of all mankind, the moſt liable to ſurfeits; and when they reflect, that the very weakeſt parts of their conſtitutions, are the digeſtive organs, they muſt either be ſparing in their good things at table, or expect to be puniſhed for their indiſcretions. There are few of the number, who have not had experience of this truth.

Having recommended a milk breakfaſt, I am aware that many objections will be oppoſed to it. I have been often told the ſtomach could not bear it. If a phyſician is pliant enough to yield to ſuch excuſes, he runs a poor chance of doing any good in theſe diſorders. This is the common language of perſons who have worn out the excitability of their ſtomachs, by ſtrong green tea and other improprieties of diet. The ſoft bland milk does not convey to them that warmth which they have been accuſtomed to receive from more ſtimulating fare. But let them be encouraged to perſevere; and as this alteration of breakfaſt, is only a part of a greater reverſion in modes of living, it will not fail in the end to be agreeable. I muſt on that account caution them againſt any mixture of ſpirit, or even ſpice in their milk. But if the acidity afterwards ſhould be troubleſome, they may with eaſe correct it by calcined magneſia, or fifteen grains of prepared powder of chalk, as the bowels may be ſlow or otherwiſe. To young women of all ranks, the milk breakfaſt is peculiarly adapted: and I have the authority of Sydenham, that it is the beſt food for the gouty.

From the experience which I have had, in ſome thouſands of theſe caſes, under all the variety in which they uſually appear, I freely give it as my opinion, that the only *means of cure* lie in a total abſtinence from every ſpecies of ſpirit or fermented liquor; from every thing that bears any analogy to them, ſuch as tea, coffee, opium, and all other narcotics; and to regulate the diet, cloathing, air, exerciſe, and paſſions, as becomes a rational being. The improper uſe of theſe articles being the *chief cauſe* of nervous indiſpoſition, it follows that no recovery can be perfect, till they are *in toto* diſcontinued.

Attention to the ſtate of the bowels forms an important part of the prevention: but if due regard is had to air, exerciſe, and diet, even habitual conſtipation may be overcome. What relates to its relief otherwiſe, will be noticed in the proper place; but if the food can be ſo regulated as to ſupercede medicine, it is an important point gained.

The whole of the precepts which have been delivered, as the means of prevention againſt this ſingular train of diſeaſes, it will be readily perceived, turn upon a *reverſed mode of living*, or changes oppoſed to former habits; and to

bring our patients back to a ſimple regimen of food, air, exerciſe, &c. Our plans comprehend no favourite theories, or any intricate doctrines; they aim at being natural, ſimple, and eaſy to be underſtood.

Some ſtriking inſtances of the beneficial effects of theſe rules, when entered upon with a determined ſpirit, have been proved in my own practice. A few years ago, when it was my good fortune to be honoured with unbounded confidence by the naval ſervice, I was conſulted by ſome particular friends, of great affluence, on the bad health of their wives, who, to the regret of all connected, had never been in that happy way,

"Which ladies wiſh to be, who love their lords."

Theſe ladies, after being married for ſeveral years without having children, devotees of faſhionable life, and a prey to painful nervous diſorders, are now the mothers of healthy boys and girls, and enjoy the beſt health imaginable. All theſe happy changes were effected by little aſſiſtance from medical preſcription; they were brought about by *reverſed modes of living*. A few viſits to their town friends, and an equal number to a provincial aſſembly, are all that theſe once gay parties

now ſee of the faſhionable world. What married woman could refuſe to quit a life of late hours, inſipidity and diſſipation, for ſuch tokens of happineſs and health?

Change of climate is one of thoſe means of relief in nervous caſes, that may ſometimes be reſorted to with great advantage. There are nervous perſons who are moſt ſenſibly affected by variable weather; where the tranſitions are quick, particularly from ſettled and clear, to damp and foggy. The human nerves in ſuch patients are like barometers: it is thus the fall of the year, in November and December, is proverbial for lowneſs of ſpirits and melancholy. A reſidence in Italy, or the ſouth of France, for ſome time, may therefore be uſeful to ſuch as can afford it. But it muſt be remembered, if theſe perſons return to Britain without having made great changes in the diſcipline of health, they muſt expect freſh attacks of their complaints. A climate not too warm, where the atmoſphere is clear, and the temperature equal, or not liable to extremes, is chiefly to be preferred by ſuch people. Here again the change of ſcene may have a powerful influence on the mind.

From the effects which theſe diſeaſes are

known to produce on the ſpirits, there is a *moral regimen*, as it may be called, neceſſary for our patients, and which muſt remain with themſelves. The perſon who is ſubject to nervous affections, can ſeldom promiſe himſelf long equality of health and ſpirits: theſe viciſſitudes muſt often happen, from cauſes which neither could be foreſeen nor prevented, and ſometimes when leaſt to be ſuſpected. The mind, however, is not always prepared to combat ſenſations that impreſs it with ideas of diſſolution; otherwiſe it could not ſo fully believe in imaginary horrors. It is a ſingular fact, that even men, whom I have known, renowned for valour and perſonal courage, and who have been familiar with danger, ſhould ſometimes be found among the number of thoſe who conceive ſuch dread from indiſcribable feelings, and torture themſelves with a phantom. When theſe halluci-nations are removed, the patients can condemn the imbecility that created their fears; yet nevertheleſs, on a next attack their apprehenſions are renewed as ſtrongly as ever. The judgement being thus perverted for the time, the falſe perception is to be conſidered as a degree of delirium and temporary inſanity.

When the patient perceives the firſt approach of theſe odd feelings, he ought to turn his attention *inſtantly* to the recollection of ſuch ſcenes and objects, as he has been accuſtomed to contemplate with much pleaſure, and review with ſatisfaction: there let him rivet his memory, and if he can raiſe it to extacy, he will infallibly ſubdue the morbid aſſociations, and the frightful images which they preſent to the mind. This kind of mental controul will be difficult at firſt: but we have known patients who became quite adepts in the practice of it, and ſecured themſelves from many painful ſtruggles. It unfortunately happens in theſe moments, that bad actions and ſubjects of affliction are moſt apt to occupy the memory; hence it is that wicked men are ſaid to have ſuffered the pains of hell in this world. Some nervous people in this ſtate of derangement, have ſo magnified their own guilt, as to make formal confeſſions of crimes they never had the moſt diſtant idea of committing.

If when in company, any thing happens to be ſaid, which brings to recollection any diſtreſſing circumſtance, the nervous invalid muſt either retire, or the converſation muſt be changed. And ſuch of them as live much

alone, muſt endeavour to regulate their train of thinking, ſo as to turn it quickly, the moment any thing diſagreeable is called up to memory. I once witneſſed a very affecting ſcene of this ſort: a gentleman in company repeated a line from Cato,—

"Welcome my ſon; there lay him down my friends."

A lady in the room who had loſt an only ſon ten years before, was immediately thrown into violent hyſterics, that had nearly proved fatal. The habit of breaking up theſe aſſociations gives a new reliſh to life; while the want of reſolution makes nervous people ſo frequently their own tormentors. And when they acquire this manner of ſelf-government, if I may ſo ſpeak, it is ſurprizing what confidence it gives to the mind.*

* For the following anecdote of Dr Cullen, I am obliged to the late Mr Whale, rector of the grammar ſchool of Kelſo, an eminent ſcholar, who had lived in Hamilton, where Dr Cullen once practiſed. Dr Cullen was ſubject to gout, and poſſeſſed thereby the prediſpoſition to nervous affection, and often ſuffered from *demiſſio animi*. He had a ſevere attack of low ſpirits, perhaps brought on by narrow circumstances,

As mankind in theſe diſeaſes, are ſo often the authors of their own miſery, *compunctious viſitings of nature* muſt frequently recur. In ſuch conditions of affliction, I do not ſee that it is at all out of character for the phyſician to adminiſter even what is called *ſpiritual comfort.* A medical friend who may know the value of religious duties in his own life, cannot be an intruſive monitor at a time when diſtreſs opens the avenues to the human heart; and when his profeſſional viſits neceſſarily attach confidence, which cannot be repoſed in a ſtranger, and who may be leſs converſant in thoſe failings that ſome times bend the ſtrongeſt. There are alſo certain delicate ſituations with low ſpirited people, that make a formal viſit from a clergyman impracticable, however much it may be wiſhed for otherwiſe. I believe it is a common remark

and great application to buſineſs and ſtudy; when he was ſurpriſed in his *lackadaſical* mood, by a friend coming in —" I am very ill indeed," ſaid the doctor. The gentleman endeavoured to divert him from his glooms: *Do you never build caſtles in the air by way of amuſement, Doctor?* " Oh no, I have not even ſtrength for that." *Did you never imagine yourſelf a great general, leading victorious armies to battle, and enjoying a triumph?* " No, by ——, not even in imagination did I ever fancy myſelf a ſoldier!"

of the profeſſion, that on the ſick-bed, we obſerve more fortitude of mind among women, than is to be found among men. We muſt attribute this excellence in the ſex to ſuperior virtue; and to their being educated more in domeſtic life, where religious and moral habits take deeper root, by being leſs corrupted from intercourſe with the world.

Perſons liable to theſe diſeaſes, muſt be cautious how they plunge themſelves into any affairs or buſineſs, where croſſes or diſappointments may irritate the temper. As they are commonly ſubject to ſudden guſts of paſſion, a prudent and guarded command over them, is the only ſecurity for tranquillity of mind, and a ſmooth paſſage through life. The nervous frame muſt, therefore, truſt to ſelf-regulation, in a great meaſure, for exemption from many painful affections, over which the powers of medicine have no controul.

Having thus finiſhed the means of prevention for nervous diſeaſes, or what may be called the mode for correcting the prediſpoſition, it will readily appear that the whole of our precepts have an equal application againſt the arthritic diatheſis. If *gout* can be prevented at all, it muſt be by a rigid adherence to ſimpli-

city of living; whether in air, exercise, food, cloathing, passions of the mind, &c. and to avoid all excesses and debilitating pleasures which are known to enervate the general frame, or weaken the chylopoietic organs. I know of no distinction that can be drawn between the habits of body that give birth to gout and nervous diseases, beyond what has been said in the preceding part of this work; and it appears that the most successful prevention of both, will much depend on its being enforced from the birth, and continued through life. The gouty constitution is certainly injured by every excess of stimulus, like the nervous temperament, but particularly by *narcotics* of all descriptions. If any fact more than another has been proved in my own practice, it is that spiritous liquors, and all wines, with tea, opium, mercurial courses, and the sexual indiscretions, are the chief causes of the *acquired predisposition* that equally engenders both these diseases.

I come now to the *treatment*, that may be called more strictly medical. And it is to be remembered, that the *whole* of the precepts,

which have been delivered under the prevention, are to be duly attended to during the uſe of medicine; for unleſs regard is paid to them, articles of *Materia Medica* are not only of no avail, but may ſometimes do much harm.

Though I repoſe due confidence in medicine, when well timed, it is to be obſerved, that here the practice is directed againſt a diſeaſed ſtate of ſenſation and motion, brought on by cauſes which exert a peculiar influence on the nervous ſyſtem: cauſes which invert all the regular operations of a moſt complicated ſet of organs; and in the cure of which the common reſources of our art ſeem to loſe their uſual power. Thoſe cuſtoms and habits which form as it were a part of Nature in the living body, are to be counteracted by reverſions in diet, air, exerciſe, and even mental regimen, great in proportion to the morbid affections they are intended to overcome. In the body we obſerve ſymptoms that counterfeit every other diſeaſe, forming a part of this aſſemblage; and in the intellectual functions we find diſproportionate emotions and the moſt extravagant illuſions.

The indications of treatment may be divided into two heads,

I. To ſtrengthen the conſtitution:

II. To palliate particular ſymptoms.

1. To preſcribe for a claſs of diſeaſes, ſo variable in appearance, and equivocal in their ſymptoms, requires a full ſhare of experience and diſcernment, and not a little patience in actual attendance. The phyſician muſt often take a very circuitous route to put queſtions to his patients, that he may learn the real genius of the diſtemper. He muſt in many caſes be guarded in his inquiries, leſt he excite fears and ſuſpicions in the irritable mind, which is obſervant of every trifle, jealous of a whiſper, and when once alarmed, however falſely, not eaſily quieted again.

I have generally found it the beſt way to be candid and open in my opinions with nervous people. It is the conduct which will inſure moſt ſatisfaction in the end, whatever temporary embarraſſment it may occaſion. And I have never found it improper to inform them of every article of medicine preſcribed, and to explain the effect I expected from it. By theſe means they will not be taken by ſurpriſe, for if they find themſelves deceived once, their con-

fidence will not be eaſily regained. This demeanor becomes the more neceſſary, as they are very apt to liſten to ſtories of wonderful cures, and to pore over medical books, that they may compare the opinion of their phyſician with what they imbibe there.

In the treatment, it is always to be conſidered, how far theſe diſeaſes are the primary complaint, or *idiopathic;* or how far *ſymptomatic*, and excited by another diſorder. Wherever the body has been reduced to great debility, the leading features of a nervous temperament when preſent, will appear: and the method of cure for the original diſeaſe, muſt conjoin with it the appropriate treatment of nervous affection. Many females, with a delicate and irritable nervous ſyſtem, at the *period*, experience more or leſs of theſe complaints; and they ſubſide with it. If they were even ſevere for the time, we are acquainted with the reaſon; and it would be improper to haraſs the patient with quantities of medicine for ſymptoms, that we know muſt decline in a day or two, perhaps in as many hours. Similar cautions muſt be uſed, when from any cauſe the menſes ceaſe, and ſevere nervous affections ſupervene. This may happen from pregnan-

cy; and the treatment muſt be guarded accordingly; for all the ſigns of breeding are from ſympathy between the uterine ſyſtem, and the chylopoietic organs. The lying-in ſtate, even under the moſt fortunate circumſtances, will, for the ſame reaſons, be often marked by a recurrence of nervous complaints. In ſuch ſituations it is impoſſible to lay down rules, as the practice muſt vary according to the peculiarities attending, whether from ſevere and lingering labours; exceſſive flooding; puerperal fever; improprieties of diet or regimen; paſſions of the mind; milk fever; diſeaſes of the breaſt, &c. all of which will bring forth nervous affections of the moſt afflicting kind, ſuch as frequent ſyncope, cramps, convulſions, delirium, &c. I was lately called to viſit a woman, when the midwife had taken away ſixteen ounces of blood, under the idea that a pain of the ſide was a *pleuriſy:* delirium commenced immediately, with violent convulſions; and the patient died in forty-eight hours from the bleeding. In no conditions of a diſeaſed ſtate of body, are miſtakes of the nature of a complaint, ſo liable to lead to fatal conſequences as in the puerperal patient.

Married women who have never borne chil-

dren, it is ſaid, are more liable than mothers to theſe diſeaſes. The nervous female commonly finds her health improved when ſhe becomes a parent; from which it may be fairly inferred that the child-bearing period is favourable to the conſtitution. Every intelligent mind knows well, whatever cares a family may bring with it, they are more than overbalanced by the ſweet ſolicitudes of affection which ſpring from them. Hence every wife wiſhes to be a mother: the want of children thus grows to a misfortune, and thoſe motives for energy of mind are neglected. But if this misfortune has been owing to nervous indiſpoſition, brought on by any cauſe which has been aſſigned in theſe pages, if it is at all remediable, the means are obvious, and eaſy to be employed.

When theſe diſeaſes appear about the age of puberty, at a ſeaſon when delicate changes take place in the ſyſtem, we are then aware of the event, and can calculate upon their decline. Their appearance at this time of life, is marked by a ſingular train of phenomena, all depending on a mobile condition of nervous power, as the body acquires the poſſeſſion of new paſſions and new faculties. The generic

names of *chorea* and *chloroſis*, have been given to theſe diſeaſes; but I hold them nothing more than traits of the nervous temperament. *Chorea* or *St Vitus's* dance, commonly begins ſome years before the age of puberty; and in both ſexes it ſeems to decline as ſoon as the body has acquired its ſtability, and the ſexual organs are fairly evolved. It conſiſts of involuntary motions of the extremities, and ſometimes of the muſcles of the face, appearing like antic tricks and geſticulations; but there is alſo more or leſs of dyſpepſia. I have ſeen ſome inſtances where convulſions and delirium of a ſingular kind attended this diſeaſe.

The predominant ſymptoms of *chloroſis* are muſcular debility, ſallow ſkin, indicating deficient oxygen in the blood, and great derangement of the chylopoietic organs, with other ſymptoms of dyſpepſia and nervous affection. There is commonly a deſire for eating duſt, chalk, or lime, and probably depending on exceſſive acidity in the firſt paſſages. As this complaint chiefly appears about the age of puberty, it has juſtly been conſidered as having ſome connexion with the evolution of the uterine ſyſtem: and years of bad health ſometimes follow, before the menſtrual diſcharge is

duly eſtabliſhed. With this all the dyſpeptic ſymptoms diſappear; the mammæ ſwell, and the countenance reſumes its roſy colour; the body recovers its muſcular ſtrength, and the ſhape is moulded into all the ſoftneſs of form and beauty. But at the ſame time, it ought to be remembered, that the male conſtitution, at puberty, is alſo frequently ſubject to chlorotic indiſpoſition. As *chorea and chloroſis* indicate the preſence of the nervous temperament, I have nothing particular to offer on their treatment; it falls entirely in with our general plan. Theſe complaints are another confirmation of that intimate ſympathy which ſubſiſts between the ſexual organs, and the chylopoietic viſcera. There can be nothing ſtrange in theſe ſymptoms appearing in an aggravated form at this age, where the nervous power is very mobile; for we find other ſymptoms ſometimes at an earlier period, that are uſually conſidered as the diſeaſe of riper years, namely, the *fluor albus*. I have at this moment two children of ſeven years of age, now convaleſcent of that complaint, with all the ſigns of hereditary nervous prediſpoſition.

In directing forms of medicine for our patients, there is one rule muſt be carefully

attended to, not to ſicken the ſtomach by beginning with a large doſe. If the digeſtive organs in their deranged ſtate are incapable of acting on the food, how much more may they be oppreſſed by a nauſeous medicine. This article, as well as the diet, muſt undergo the digeſtive proceſs, if it is to be uſeful; and it is the buſineſs of pharmacy ſo to prepare it, that it may beſt anſwer this purpoſe. It is not that a medicine is to be ſweetened to cover its bad taſte, or warmed with ſpirits, that it may afford a grateful ſtimulus to an exhauſted ſtomach: it muſt be exhibited in a ſtate wherein its powers may be moſt effectually exerted on the nerves of that organ; or ſo eaſy of decompoſition, as to combine readily with the animal fluids, and yield its qualities to be conveyed by the circulation to remote parts. Cinchona, or Peruvian bark, ſo often preſcribed in nervous and dyſpeptic caſes, has been ſometimes given to the amount of two ounces in ſubſtance in twenty-four hours; and becauſe the ſtomach did not reject this enormous load by vomiting, it has been triumphantly exclaimed, that large doſes only could do good. Such a quantity could only produce torpor and inſenſibility; its active qualities could not

be exerted as a medicine on the gaſtric nerves; for what ſolvent in the ſtomach could effect its decompoſition? For my own part, I have never met with patients who could retain ſuch quantities of bark. It appears to me much more rational to begin with ſmall doſes, and to watch its effects. Hence we learn that decoction and infuſion will ſometimes ſucceed, when the powder has failed. Theſe forms ſeem to derive ſtill further power, by being conjoined with ſome of the alkalies, the carbonate of lime, (chalk,) or magnes. uſt. all of which not only increaſe its activity, but make it to ſit eaſy on the ſtomach. The pharmaceutical treatment of moſt of the bitters more or leſs reſembles that of cinchona.

It is ſometimes neceſſary to premiſe a *vomit* or *purge*, or both, before the uſe of ſtrengthening remedies, as the ſtomach and bowels in their irregular ſtate are often loaded with phlegm and mucus to a ſurprizing degree. Beſides the capricious flow of the bile into the duodenum is often the means of rendering different portions of the inteſtinal tube torpid, or irritable, as it happens; and an active purgative will always have conſiderable effect in reſtoring the equal motion of the bowels.

As an emetic I prefer the ipecacuanha, to be aſſiſted by a weak infuſion of chamomile. As a gentle purgative I prefer rhubarb; and when a quicker one is required, I employ pulv. jalap. With each of theſe I uniformly combine magnes. uſt. kali or ſoda. Theſe not only correct acidity in the firſt paſſages, but alſo render the active part of the other articles more certain in their operation; they alſo become ſolvents of the animal mucus ſo often accumulated there.

After the primæ viæ are thus cleared, we may with ſafety begin the corroborant medicines; being always cautious in ſelecting and combining them with ſuch ſtimulant and adjuvant ingredients, as may make them eaſy to the ſtomach, and adapted to the conſtitution. It is impoſſible to lay down rules for what is to be directed by experience in every individual caſe: but it will often happen, that the ſame article which does harm under one *formula*, will be eminently uſeful in another. And in ſuiting the medicine to the exact condition of the ſtomach, the ſucceſs of the practice will be more or leſs compleat. The phyſician will but too often find reaſon for remonſtrating with his patient on neglecting his

injunctions, whether in air, diet, or exercise: a watchful eye must therefore be kept over the regimen, that medicine may not fall into unmerited discredit.

The strengthening medicines which have been chiefly employed in these diseases, are *iron*, *Peruvian bark*, and *bitters;* but *zinc*, *copper*, and even *silver* and *lead* have been used. And the mineral acids, *sulphuric*, *nitric*, and *muriatic*, have on some occasions been deservedly praised in many dyspeptic stomachs.

Iron very properly is considered as the first article in this class. Its reputation is very ancient, and physicians have been uniform in extolling its powers; they are certainly in some shades of these diseases truly wonderful. There are few of our patients whose habits of body contra-indicate its exhibition; but it is commonly forbid where there is much strength and tension of muscular fibre, and a florid dense blood. Such a state of body is seldom met with among the nervous, bilious, and dyspeptic: but we have frequently been obliged to lay aside the use of chalybeates for the very reasons just assigned.

Sydenham, who seldom erred in practice, preferred iron in its metallic or oxide state,

to all its other preparations. I can readily join in the praiſe which the Engliſh Hippocrates pronounced on this celebrated ſtrengthener; but there are certainly conditions of the ſyſtem in nervous diſeaſes, in which ſome of its ſaline combinations are to be preferred. In ſome female habits where there is vaſt diſpoſition to acidity of ſtomach, the limatura ferri, and carbonas ferri, will act moſt powerfully. And there is reaſon to ſuppoſe, that this very acidity of the primæ viæ, further oxidates the metal; by that means deſtroys itſelf, and leaves the iron in a more active ſtate to ſtrengthen the fibre, or to mix with the blood, and exert its efficacy on the whole circulation. But in caſes where there is little or no acidity in the firſt paſſages, the muriated tincture of iron, and vitriolated iron, have appeared to me to have manifeſt advantage. Again, in caſes where there is much torpor, or as you may call it, ſluggiſhneſs of fibre, and coldneſs of conſtitution, with aceſcency, then the ferrum ammonicale, or the tincture made from it, are of ſuperior efficacy. Some of the moſt fortunate recoveries which ever occurred under my own preſcription, were effected by the ferrum ammonicale. In theſe

caſes, violent pain of the gaſtric region, occaſional jaundice, flatulent colic, ſhifting ſpaſms of the whole abdomen, vaſt acidity, vertigo and head-ach, &c. were the predominant ſymptoms. Yet moſt of theſe caſes were reduced to the laſt degree of debility before I firſt ſaw them. Certainly in ſtomach and bilious complaints under extreme weakneſs, very unexpected returns to health ſometimes take place by a fortunate change of medicine. It muſt therefore be a point of nice diſcrimination in the practice, to ſuit the preparation of this metal, to the exact diſpoſition of the diſeaſe, and the idioſyncraſy of conſtitution.

When I employ chalybeates of any deſcription, it is uſual with me to precede their uſe, for a few days, with ſome preparation of bark or of bitters; and to continue them for two or three weeks with the ferruginous medicine. After a ſhort interval they may be again renewed, as circumſtances require. In this manner the two articles will effect what neither of them can do alone. But I am of opinion, with many other phyſicians, that ferruginous medicines of all kinds, ought to be continued for a length of time, if full benefit is to be de-

rived from them. Even where the good effects are early apparent, they muſt not be too ſoon laid aſide: from three to ſix months are often required to inſure all the good that may be obtained. All the different forms of iron are apt to make the bowels flow; which with ſome patients is a conſtant objection to their employment. Even the ſagacious Sydenham went ſo far as to ſay that laxatives ought not to be given during their uſe, as weakening their efficacy. It is however to be remembered, the diet of Engliſhmen in his days, was not ſo full and pampering as in the preſent times. This opinion of Sydenham has however had very little weight with me: I not only interpoſe laxatives during the uſe of iron, but ſometimes order a ſmart purge at intervals; and ſo far am I from thinking that it weakens the power of the other medicine, I have always thought it neceſſary for ſecuring its beſt efficacy. The office of the inteſtines muſt be preſerved regular in ſuch patients, if any good is to be done. The kali tartar. is perhaps the beſt purgative article at this ſeaſon; and it may have ſome action on the chalybeate that we cannot well explain. If, however, our regimen of air and exerciſe is ſtrictly complied

with, there will be the leſs neceſſity for forcing the bowels with medicine.

When iron is adapted to the caſe, the good effects are firſt obſerved, in the decline of the dyſpeptic feelings: the calls of appetite become more frequent; the food digeſts with more eaſe, and acidity and flatulence ceaſe to be painful. At this time the colour of the face improves, and grows florid; and the ſkin from being ſallow and dry, becomes better coloured, ſoft, and perſpirable; the alvine fæces are commonly tinged during the uſe of iron. With theſe changes, ſtrength of body and alacrity of mind ſoon appear. In delicate females, ſome weakening ſexual ſymptoms quickly decline.

The indiſputable good effects, which have ſo often reſulted from a trial of the *Bath waters*, in many varieties of theſe diſeaſes, render it almoſt certain, that theſe have been produced by the ferruginous principle which they poſſeſs: but which is only effectual at the fountain, as it ſoon precipitates, and cannot be preſerved. As we perceive this metal when artificially managed, to effect ſurprizing changes in the animal economy, it is but fair to allow, that much more may be expected from the fine

chemiſtry of nature. It is in vain to deny this, becauſe the Bath water contains an extremely minute portion of iron, diſcovered on analyſis: the effect muſt reſt on the activity of the ingredient, whether in the ſtate of oxide or not, not on its quantity. The ſenſible qualities of the water, when drank on the ſpot, are highly ferruginous; and the ſtimulant power is ſo perceptible, that in ſome habits of body, it is dangerous; inducing temporary fever and vertigo, and in ſome inſtances apoplexy. The torpid habit is, therefore, moſt relieved by them; perſons worn down by the diſeaſes and exceſſes of tropical climates; and thoſe debilitated by luxurious and hard living at home. The regular hours, correct manners, and elegant pleaſures of the company at this faſhionable place of reſort, become the beſt antidotes in life, againſt licentious drunkenneſs: no wonder then the enervated debauchee ſhould return healthy, and ſometimes reformed, from a courſe of Bath waters. But when nervous, bilious, and dyſpeptic complaints depend, as they often do, on a *gouty diatheſis*, Bath waters are a ſovereign remedy. The energy which they quickly impart to the chylopoietic organs,

is ſoon extended over the whole frame ; and all thoſe anomalous ſymptoms, uſually called *flying gout*, ſeem to rally to a point, and ceaſe, when the affection comes to be fixed in the extremities. I am thus induced to mention theſe ſalutary ſprings, under the method of treatment.

With reſpect to the effects of the preparations of *zinc*, *copper*, *ſilver*, *and lead*, which have been tried in theſe diſeaſes, excepting the firſt, I have little experience of them. I have frequently combined the *oxide* of zinc with *carbonas ferri*, and other forms of iron, certainly with great effect ; but not more than what is daily ſeen of iron by itſelf. A farmer lately brought his ſon to me, who by the deſcription, had been ſubject for ſix weeks to fits three or four times in the day, that were epileptic. He ſaid he was returning at night to his father's houſe, and in a thunder ſtorm was ſtruck down by lightning. He was an hour and half in getting home, though not more than a mile from the place ; and being inſenſible, he did not know where he was till morning. I found he had an hereditary nervous temperament, and many ſevere dyſpeptic ſymptoms. I ordered iron, zinc, and cinchona, in

the form of electuary. After the firſt three doſes, the convulſions ceaſed: but he took his medicine only a fortnight, and the fits returned. He refuſed to go on with it, and I ſaw him no more. In this caſe, I was guided in the practice, by the dyſpeptic ſtomach and prediſpoſition. Of the *cuprum*, *argentum*, *et plumbum*, I have no experience. The iron is my grand ſafety. I fancy the reſources of *materia medica* are ſufficiently abundant at preſent; the beſt phyſician muſt be he who can beſt ſelect, and beſt prepare what we now poſſeſs.

The *cinchona*, or *Peruvian bark*, ſtands foremoſt in our liſt of medicines taken from the vegetable kingdom. No article of materia medica has acquired equal reputation; but it is the fate of this medicine, to be often diſpenſed from the hands of ignorant people, where neither the diſeaſe, nor the nature of the bark, are underſtood; and it muſt frequently do harm. Some attention ought certainly to be paid to the manner in which it can be exhibited with moſt effect. The powder has been ſaid to be the moſt effectual form, but there are many ſtomachs that cannot bear it in ſubſtance. If therefore ſmall doſes do not ſit eaſy, the in-

fuſion or decoction muſt be tried ; and it is the beſt way to begin even theſe in ſmall quantity. To exhibit the bark in tincture in theſe complaints, is an inconſiſtency in practice : it is no doubt very grateful to ſome ſtomachs, but let us remember we are pouring into the body one of thoſe narcotics, that is daily bringing nervous afflictions upon thouſands. It is, however, ſometimes neceſſary to add a ſmall proportion, to preſerve the watery preparation from ſpoiling. It frequently happens that bark acts purgatively, and paſſes rapidly through the bowels; and laudanum has been the common corrector of its purgative quality. But I object to opium in any form, in theſe diſeaſes, unleſs we are compelled by urgent pain. I have always found *creta preparata* ſufficient for this purpoſe : for it would appear, that this effect of bark is chiefly to be met with in thoſe ſubject to great acidity. I even find it neceſſary to combine *ammonia* with bark ; as both chalk, magneſia, and the fixed alkalies, are ſometimes incapable of ſubduing the vaſt acidity in the firſt paſſages ; and I think this is frequently one of the beſt additions to the other. In my own practice I have long conſidered theſe anti-acids, when well timed, as the cauſe

of my ſucceſs. With reſpect to aromatics, as adjuvants to either the bark or bitters, their good effects are very doubtful with me. I wiſh to exclude from medicine, as well as diet, every thing that is warming; and I have a ſtrong ſuſpicion that aromatics invert the action of the fibres of the cardia or upper orifice, and thereby occaſion belching, which is falſely ſaid to be uſeful.

When the extract of bark is genuine and recently prepared, it will be found in ſome caſes, to ſucceed, where milder forms of the medicine have failed. I have given it in both pill and ſolution with great effect. I combine the pill with a third of gently calcined ſoda; and I think, by thus converting the extract into a kind of ſoap, the ſolution of it in the ſtomach is more certain and equal, and the effect much increaſed. This form of pill anſwers very well with all the bitter extracts, ſuch as gentian, chamomile, &c. The diſtilled water of peppermint forms a good vehicle for the ſolution, and the extract mixes perfectly, when a due quantity of kali prepar. is triturated with it.

When bark or bitters produce conſtipation, laxatives may be aptly joined with them. I

prefer rhubarb and jalap, though I have no objection to kali tartar.

Next in power to cinchona I reckon *anguſtura bark*. This article has not been long in uſe in this country; it is certainly a valuable addition to *materia medica*. It is a rougher medicine than the bark, and ought to be given in ſmaller doſes; and in thoſe ſtomachs where it ſits eaſy, it acts powerfully in ſubduing dyſpeptic ſymptoms. It may be therefore proper to begin with infuſion and decoction, joining to them magneſia uſt. and the alkalies, as in the pharmaceutical treatment of bark. Anguſtura, from its aſtringency, is more apt to bring on conſtipation than bark, ſo that ſome of the milder laxatives, ſuch as kali tartar. may be advantageouſly taken with it: and for this reaſon it is better adapted to thoſe caſes of nervous affection, where a laxity of bowels forms part of the diſeaſe. It is alſo an excellent anthelmintic, and may be given to children ſubject to worms, in the morning faſting, triturated with magneſia and ſoda, preceded and followed by a briſk purge as directed before.

The *gentian root* is perhaps one of the beſt pure bitters in this claſs of diſeaſes. The compound infuſion of the Pharmacopeia Lon-

dinenſis, vel Edin. is the moſt advantageous form to employ it, to which may be added magnes. uſt. carbonate of lime, or the alkalies. When bitters are firſt tried they are apt to ſicken ſome ſtomachs; but this ſhould be remedied by leſſening the doſe. It is true that a pill of extract of gentian and ſoda as directed before, is more eaſily taken; but I think by this change we loſe conſiderably in the value of the medicine. All bitters ſeem to act moſt powerfully when largely diffuſed; where there is much acidity as the effect of fermentation of the food, with great flatulence from the ſame cauſe, they produce very ſudden relief. It is known that bitters chemically check the fermentation by ſome antizymic power, and correct acidity by the ſame means. I never permit the uſe of any of them beyond ſixteen days at a time.

Colomba root has become a favourite medicine in theſe diſeaſes, with a number of phyſicians in this country. It is certainly a very agreeable bitter, but I think in effect leſs than gentian. It has been ſaid to be particularly uſeful in bilious caſes; but it does not appear, even in that trait of the nervous temperament, that it ſurpaſſes other bitters, however ſucceſs-

fully given, where there is much uneaſineſs from indigeſtion, acid eructations, and diſtention. I would recommend the ſame pharmaceutical treatment of colomba, as mentioned of gentian. Chamomile, ſantonicum, wormwood, quaſſia, &c. are all of the bitter claſs, and reſemble one another in virtue. It is certainly an object in practice to chuſe the moſt powerful, which is gentian. A very valuable addition is now made to this claſs by the *ſalix latifolia*, which anſwers well in decoction to be taken with any of the ferruginous preparations. Articles of the growth of our own ſoil ought to be encouraged by all medical people. See an ingenius Eſſay on this medicine, by Mr Wilkinſon, of Sunderland.

2. I come now to the ſecond head of treatment, viz. *To palliate particular ſymptoms.* This is ſometimes a difficult taſk in theſe diſeaſes; as what tends moſt to give immediate eaſe, is what muſt inevitably have the effect of increaſing the prediſpoſition, and endangering the return of the complaint in a more aggravated form. Such I conceive to be the effects of ardent ſpirit, opium, and all other narcotics. To a perſon who reflects properly on the horrid effects of dram-drinking, nothing

can be ſo diſguſting as to ſee ſpirits ſwallowed in an undiluted ſtate. It is therefore my ſolemn opinion, that they ought never to be reſorted to on trifling occaſions; for when often repeated, even in the hands of the moſt cautious, they cannot fail of injuring the ſtomach. They moreover undermine health by favouring the attachment to ſpiritous liquors. And ſuch is the effect of opium, that many women ſubject to hyſteria, are very apt to be ſeized with a fit, whenever they take a doſe of laudanum. I have known numberleſs inſtances of this kind; even epilepſy is ſometimes the conſequence. Other women I am acquainted with, who never can uſe opium in any form, without a temporary delirium of the moſt diſagreeable kind, and followed by ſickneſs at ſtomach ſtill more diſtreſſing. Theſe extraordinary effects chiefly ariſe from great mobility of nervous ſyſtem. Too much caution cannot therefore be beſtowed, to avoid temporary palliatives, that muſt ultimately produce permanent pain.

In the courſe of my paſſage through the world, I have at different times known ſome faſhionable women in high life, of the nervous temperament, who had got into the baneful

habit of uſing opium as a *cordial.* Some of them were ſo familiar with it, as to carry a vial of laudanum conſtantly with them: a long evening could not be paſſed abroad without retiring to repeat the doſe. The conſequence of all this, as muſt be readily imagined, was continual bad health. Though none of theſe ladies were beyond middle age, yet they had all the looks of old women. It muſt be a grievous ſtain on the medical character, if ſuch habits took their beginning from any inconſiderate practice of a medical attendant. I am afraid the profeſſion is not free from this imputation. A man who carries for ever on his face the ſleek ſimper of artful inſignificance; who has a bow and a ſmile ready for every perſon that addreſſes him, will be very apt to accommodate his preſcription to a faſhionable folly.

The firſt ſtep to health is to avoid the cauſe of diſeaſe. But there are ſome phyſicians who contend that it is hurtful for habitual drunkards to leave off the bottle at once. Were the habit of dram-drinking a ſalutary practice, there might be ſome truth in this dictatorial precept. But as ardent ſpirit is a ſtrong poiſon to both ſoul and body, and forms no part of that nou-

riſhment which can be converted into animal matter, I have never been able, after the moſt unwearied application in the exerciſe of my profeſſion, to find a ſingle fact in ſupport of a doctrine ſo deſtructive of moral and phyſical health. Whenever I have known habitual ebriety completely overcome, it has been where all ſpecies of liquors were given up *in toto from the firſt.*

The delirium which ſucceeds the paroxyſm of ebriety, is of two kinds, the *phrenitic* and the *nervous.* The firſt bears bleeding and other evacuating means: the laſt is to be treated by ſtimuli. But wine or ſpirits ſhould never be uſed; as bringing up to recollection the pleaſing ſenſations which precede drunkenneſs, and connecting thoſe aſſociations which it is the province of medicine to break aſunder. When there is much watchfulneſs, and little inclination for ſleep, in the nervous delirium, opium in due doſes muſt be given. But nature in this caſe, as in many others, with nothing beyond the uſual ſtimuli which accompany temperance, recovers the powers of reaſon: the conſcious pleaſure of reſuming ſober habits, as a mental excitement, muſt be one of the beſt on ſuch occaſions. The treat-

ment of phrenitis does not belong to this work.

The moſt painful ſymptoms which attend nervous indiſpoſition, are thoſe *cramps and ſpaſms* which particularly affect the ſtomach, bowels, kidneys, ureters and bladder. In the female ſubject they are moſt apt to occur at the *period;* and often commence in an inſtant. Such women ought to be careful about the ſtate of the bowels and ſtomach at that time, with reſpect to the kinds of food and the alvine diſcharge; ſo as to obviate acidity, flatulence, &c. the painful companions of that ſtate. The amenorrhœa, or ſuppreſſion, from whatever cauſe, is alſo remarkable for the recurrence of theſe ſymptoms, which are ſeldom fully relieved till regularity is reſtored. The condition of mind is worthy of great attention at that time; for every ruffle of paſſion creates miſchief.

The *warm gums*, as they have been called, have been long in uſe for theſe troubleſome pains and other nervous affections. They have been adminiſtered in the form of pill and tincture; not without ſome confidence being given to their unpleaſant flavour, a ſingular way of prejudging the effects of a medicine.

In nothing have I been more diſappointed, than in the fœtid gums; and where they have been apparently uſeful, it was probably from the ſpirit taken with them. Like aromatics, they cauſe eructation, which is ſaid to be a good effect; though with me an opinion that they invert the fibres of the cardia, which is improper. Aſafœtida is the foremoſt of this liſt: but it ought to be remembered, that its tincture in the modern pharmacopeias, is made with *alcohol;* and a teaſpoonful or two, however diluted, comes to be a tolerable dram. Here the alliaceous flavour is very ſtrong and impregnates the breath. In the form of enema I have however known the aſafœtida very uſeful. Caſtor, ol. animale and muſk, are preſcribed for the ſame purpoſe as aſafœtida: but though they may poſſeſs a ſtimulant power, it is very trifling and tranſitory; they are moreover, apt to diſorder the ſtomach and bring on vomiting. Camphor and ammonia are of much greater value in nervous pains; and their effects more permanent. Æther is alſo a common remedy, and when joined with opium and ammonia, of great ſervice. This is a judicious mode of exhibiting laudanum, for a ſmaller quantity is required

than when given alone. Valerian is another of the fœtid tribe, frequently ordered in large quantity, to the manifeſt injury of the ſtomach. I believe it to be a very inert ſtimulant. As opium is known to produce a ſlow ſtate of bowels, ext. hyoſciami nigri, which has a laxative quality, was long ago recommended by Dr Whytt in theſe diſorders. We certainly by this change get quit of ſome of the bad effects of the opium; but hyoſciamus extract muſt be recently prepared to be active; and there is ſome difficulty in aſcertaining the doſe at once.

But when pain and reſtleſſneſs become urgent, and when common harmleſs remedies fail, there is no reſource beſides *opium*. We know its ſovereign powers as an anodyne, and we muſt compound with its bad effects in the beſt manner we can. We ought to combine it with ſuch articles as co-operate with it, ſuch as æther and ammonia, and the beſt vehicle is the miſt. camphor of the diſpenſatory. But it often happens that the ſtomach rejects the liquid medicine, and the dry opium may be ſubſtituted. I prefer the mode by *enema;* and we may combine diluted ſpirit, or ſome of the ſtronger white wines with it, ſuch as Madeira

or Sherry, to great advantage. I have never been diſappointed with a clyſter of this ſort. This alſo in a great meaſure prevents ſickneſs at ſtomach afterwards.

Some other ſymptoms which come on ſuddenly in nervous caſes, ſuch as *vertigo* and *head-ach*, *palpitation* and *faintneſs*, do not admit of ſuch eaſy relief. They commonly attend ſome diſordered ſtate of the ſtomach and bowels, and to theſe the medical regimen muſt be directed. * The hyſteric and epileptic pa-

* I was lately conſulted in a remarkable caſe of *palpitation*, in a girl of eight years old. The motion was ſo violent it could be ſeen at a conſiderable diſtance, and it was conſtant, though ſomewhat increaſed by violent exerciſe. It appeared hopeleſs, from the idea of organic affection in the heart: but the girl was in general bad health, and of a ſtrongly marked *nervous temperament*. I therefore directed my advice to correct the prediſpoſition, which was chiefly to the relief of the ſtomach. The next time I ſaw her, the complexion was entirely changed; ſhe was grown florid and beautiful, and full in fleſh. I now think, extreme irritability in the heart, with nervous weakneſs, was the whole diſeaſe. Similar caſes have come under my obſervation, but none ſo violent as this: yet it is ſurprizing to ſee to what a height this ſymptom will ariſe in female habits. An *appeal* to the ruling temperament muſt therefore be always a ſafe reſource to the phyſician.

roxyſms, are convulſions that ſometimes give alarm of their approach; but at other times their attack is inſtant. We certainly poſſeſs no medicine that either prevents or ſhortens theſe convulſions. I have ſeen epilepſy checked by the ligature round the thigh, when the ſenſe of the *aura*, as it is called, was aſcending the thigh: but in other caſes the ligature did not check the *aura*, or prevent the fit. The only treatment which I can recommend here is the whole rules of prevention; which improve the health, by abridging the prediſpoſition. If, as I contend, epilepſy is the offspring of the nervous temperament, the force of that muſt be leſſened; and all cures of this convulſion by any particular article, can have no real exiſtence.

Acidity and flatulence being two of the moſt painful ſymptoms attending theſe diſeaſes, the common correctors are well known; they

On the ſame principles, I have juſt diſmiſſed, cured, a caſe of *epilepſy*, in a youth of ſixteen, an apprentice in this town, which threatened to be permanent. He had no fit after he began his medicines. But in order to make great changes in his modes of living, I ordered him to the country, with many alterations in diet, &c. during the treatment.

ought to be obviated as much as poſſible by diet, which has been ſufficiently explained. The *aerated ſoda water* has now become a faſhionable morning draught for the cure of acidity, after a debauch of wine. It is really to be met with in coffee-houſes, as if it had never been manufactured by the apothecary, and it is humiliating to the phyſical vigor of Britons to ſee ſuch degeneracy; a medicine converted into a tavern beverage! But it is worth mentioning, that a long uſe of this water hurts the ſtomach and kidneys, and produces very ſerious cutaneous diſeaſes, ſo as to injure the ſkin.

I muſt beg leave to caution perſons ſubject to nervous and ſtomach complaints, about repelling *eruptions on the ſkin*, eſpecially of the face, by any ſevere means. Theſe cutaneous affections are commonly aſſociated with the dyſpeptic diſpoſition, and when imprudently forced from the ſurface, never fail to aggravate the internal diſorder. The beſt way is to leave them to the general treatment. It is true, they are particularly diſagreeable to women; but as they are a part of the original malady, ſo they uſually yield with it. Of this patients ſhould be duly warned; for many conſtitutions have been ruined by the uſe of thoſe articles vended under the ſpecious names of creams,

dews, honeys, &c. all of which contain mercury, lead, or ſome powerful aſtringent, that repels the pimples at an improper period. When ſtomach complaints have been rendered more ſevere by this cauſe, the firſt and beſt relief is to recal them to the ſkin. The warm bath, particularly of ſalt or ſulphur water, is one of the moſt effectual means. But ſome medicines of the ſudorific claſs, ſuch as camphor and ammonia, joined to bark and iron, with warmer clothing, and exerciſe continued to the ſweating ſtage, will alſo have conſiderable effect in reſtoring the eruption.

Morning ſickneſs and vertigo are common with ſome of theſe patients. They are felt immediately on ſtanding erect, and ſometimes bring on retching and faintneſs. Theſe ſymptoms are chiefly to be imputed to the empty ſtate of the ſtomach from long faſting. They are beſt relieved by ſome taſty food, ſuch as cold ham, cold tongue, &c. taken before getting up. But warm tinctures and medicines of any ſort ought never to be reſorted to. By way of preventing this ſickneſs, I commonly direct a ſmall ſupper of meat at going to bed, ſo as to amuſe digeſtion, and breakfaſt immediately on riſing. In the early months of preg-

nancy, morning ſickneſs is a troubleſome attendant: but as the cauſe cannot be corrected immediately, the only alleviation is watching the ſtate of the ſtomach and bowels.

Want of ſleep or wakefulneſs, is one of the moſt diſtreſſing companions of nervous affections: indeed ſome perſons appear ſcarcely to ſleep at all. Cold ablution of the whole body a little before, or immediately on going to bed, is one of the beſt means which I know, to procure refreſhing ſleep in theſe ſituations. Some people find great advantage from what has been called the *air-bath*; that is to get out of bed, and walk to and fro in the room, quite naked, for ten or fifteen minutes. After growing warm in bed, drowſineſs and ſleep ſoon ſucceed this kind of noct-ambulation. But ſufficient bodily exerciſe, with moderate mental recreation, is certainly the moſt ſalutary and natural mode of inducing ſound repoſe. I think opium can ſcarcely be admitted here. The general warm-bath, ſemicupium, and pediluvium, may alſo be tried.

The external applications which are employed in *cramps and pains*, conſiſt of bliſters; camphorated oil; ammoniated oil; vitriolic æther; ſaponaceous liniment; muſtard flour;

warm flannels; bottles and bladders of warm water; hot bricks; friction; dry cupping, &c. The laſt remedy is often found uſeful, where there is much pain with coldneſs of the part; as by favouring the influx of blood, and thereby exciting heat, it proves ſtimulant. With the ſame intention, *electricity* is often employed to advantage; and to this we may now add *galvaniſm*. The warm bath may alſo be conſidered a valuable remedy in local pain, and may be practiſed with the reſtrictions formerly delivered. The vapour bath, in effect, comes near the nature of the warm bath: but pediluvium being eaſier accompliſhed, generally ſupercedes both the others.

The *ſtrangury*, and other complaints of the urinary paſſages, are beſt relieved by the fixed alkalis, ammonia, æther, and camphor, exhibited in aq. menth. pip. with the milder bitters, and large dilution. Theſe ſymptoms are apt to accompany exceſſive acidity and flatulence of the firſt paſſages. I have known caſes of this kind becoming truly alarming, from the great delicacy of the patient. This ſymptom is peculiarly frequent with women ſubject to the hyſteric affection: active exerciſe in the open air is the beſt preventive. I

know not if mucilage can have any effect here, beyond dilution from the water taken with it; but even that may be uſeful.

The *dyſpnœa and aſthma*, or diſeaſed reſpiration, which accompany theſe complaints, are often troubleſome. The flatulence of ſtomach frequently impedes the motion of the lungs and diaphragma mechanically; but when the bronchiæ and air-cells are contracted, ſo as to make the breaſt labour, and induce a wheezing of breath and change of voice, they muſt be conſidered as ſympathetic affections. Several of the ſtimuli, ſuch as æther and ammonia, are ſometimes exhibited with ſucceſs; but I would recommend the treatment to be directed againſt the diſordered condition of ſtomach; which, if properly detected, will ſeldom fail of giving relief.

It remains for me to conſider the treatment of the *bowels*, ſo generally *ſlow* in perſons of the nervous temperament. To preſerve the alvine diſcharge regular, is an indiſpenſible part of our office. The ſtomach and bowels being the chief ſeat of nervous and bilious complaints, much of the inconvenience and pain occaſioned by conſtipation is to be referred to their weakened ſtate; joined to the

ſcanty or vitiated bile which is ſent from the liver, as that organ partakes by aſſociation and ſympathy with the inteſtinal tube. By an inverſion of the action of the muſcular fibres, the periſtaltic motion is interrupted; is torpid in one place, and increaſed in another; which irregularity compreſſes the flatulence into particular portions of the canal; creates diſtention, uneaſineſs, and pain; and very frequently gives the evacuation much difference in form, conſiſtence, and colour. Theſe appearances ſometimes impreſs the patients and nurſes with extraordinary dread and apprehenſion of the diſordered ſtate of the bowels. While the nervous power of the inteſtines thus acts tumultuouſly, and in inſulated portions, violent conſtrictions are apt to happen, which give birth to the ſymptoms of *colic:* and at other times the mind is more particularly alienated, and what is called *hypochondriaciſm and vapours*, are the conſequence.

It is devoutly to be wiſhed that the bowels could be kept in due action, by diet and exerciſe, without the aid of medicine: but ſo many cauſes conſpire to defeat this purpoſe, that nothing is ſo difficult to be accompliſhed. Such patients have generally long accuſtomed

themſelves to ſome purgative medicine, often one of the moſt improper kind; and it is not eaſy to convince them they have been doing wrong. Among theſe habitual purges, calomel and aloes are the moſt frequent in uſe. As theſe articles, as well as all other cathartics, are not directed againſt the radical cauſe of the evil, they can be conſidered only as giving temporary relief. But mercury in any form cannot be long uſed by perſons of weak viſcera without harm: and aloes is a medicine of the draſtic kind, that produces great irritation in the rectum, teneſmus, and is apt to bring on *procedentia ani*, piles, and fiſtulous ſores. But purgatives of every deſcription, when frequently reſorted to, exhauſt the ſtomach and bowels, and never fail in adding to the cauſe of the complaint. It muſt therefore be a great misfortune where the body is never moved without the aid of medicine.

Such a habit as this ought to be early guarded againſt, where the diſpoſition to coſtiveneſs is hereditary. This can be done only by a ſtrict attention to that regimen, which is enforced in the former part of this work. Parents alone can effect this. It muſt be grateful to every medical attendant of a family

where it is known that a prediſpoſition to theſe diſeaſes prevails, to remind the father and mother of the neceſſary rules of prevention. Such an office will reflect great honour on the profeſſional character, as it will prove an honeſt diſregard of emolument, when the welfare of their friends, and ſociety itſelf, is ſo deeply concerned. Where medicines are required daily for children, in the ſtate of ſlow bowels, the proſpect in advanced age muſt be dreadful.

The diet in the conſtipated ſtate of body, ought to conſiſt of a large proportion of fluid aliment; in ſevere caſes it ought to be entirely of this kind, with vegetables eaſy of ſolution. What ſolid butcher-meat is taken, muſt be maſticated ſlowly before ſwallowed, which will promote the flow of ſaliva, aſſiſt its comminution in the ſtomach, and facilitate its paſſage onwards. I am well aware that very great obſtacles will be oppoſed to theſe precepts: ſome will ſpeak of their diſlike to broths; others that ſoup diſagrees with them; ſome will be afraid of borborrigmi, and others of their ſhape. But for the two laſt objections, exerciſe, not phyſic, is a certain cure; and with reſpect to the two former, if health is of

ſo little moment that no pleaſure is to be ſacrificed for it, things muſt remain as they are. The quantity of bread to be eaten muſt be very ſmall; no pudding where flour forms a part, can be admitted; cuſtards and ſuch like are allowed: all paſtry is excluded; and all the legumina, ſuch as peas and beans, are forbidden. Theſe reſtrictions are directed, becauſe whatever increaſes the bulk of the fœcal maſs, impoſes a heavier load on the periſtaltic motion of the inteſtines; and conſequently a ſlower action. Where fruit agrees it may be indulged *ad libitum*. All vinous and ſpiritous liquors are to be given up, in conditions of torpid bowels: they all act by exciting the abſorbents in the ſtomach and inteſtines; and thus deprive the refuſe of chylification of that fluid that makes it paſs equally and eaſily along.

We ought to begin with the milder laxatives firſt, and ſo aſcend to the more active; to reap full advantage they muſt alſo be often changed. The gentleſt are manna; tamarind infuſion; electuary of ſenna; ſenna; rhubarb; tartarized kali; jalap; aloes; ſcammony; jalap and one tenth of calomel; ſcammony and one tenth of calomel, &c.

It is ſometimes obſerved, that nervous and

bilious people grow corpulent and full: this is generally owing to rich food and indolence; and it is a bad trait of the temperament. Such perſons however, never bear bleeding well, even under ſome apparently inflammatory diſpoſition. The beſt plan here, is to reduce the body by low living and exerciſe, if theſe can be accompliſhed. But nervous perſons are the moſt intractable of all good livers, and have leſs reſolution to abridge their enjoyments. They not only indulge in large quantity, but that is commonly ſeaſoned to the higheſt degree of ſtimulus. For my own part I would ſooner encounter the prejudices of any ſick man, rather than thoſe of a nervous glutton. Every ſurfeit brings additional trouble to the phyſician; and he will often hear the appetite complained of, when a ſingle dinner ought to have made three. Nothing ſtands more in the way of a regular medical diſcipline than errors of this kind, and it is neceſſary to obſerve a ſharp ſighted jealouſy over them.

When, as has often happened, I have been conſulted for caſes, that ſeemed beyond the

reach of medical aſſiſtance, I have ſeen great advantage obtained by directing the treatment ſolely againſt the nervous prediſpoſition. This has frequently happened in thoſe deſperate afflictions, the cancerous uterus and mammæ; and I have ſometimes thought, had the rules of practice been tried ſooner, even in ſuch ſituations a cure might have been effected. A perfect knowledge of the *temperament*, in my opinion, forms the only baſis for a ſucceſsful treatment of all nervous and bilious diſeaſes ſo called; it leads us to the fountain head; unfolds the ſource whence the evils flow, and puts us in poſſeſſion of the only means for prevention and cure.

FINIS.

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